

Pixii Company presentation

August 2023



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PIXII

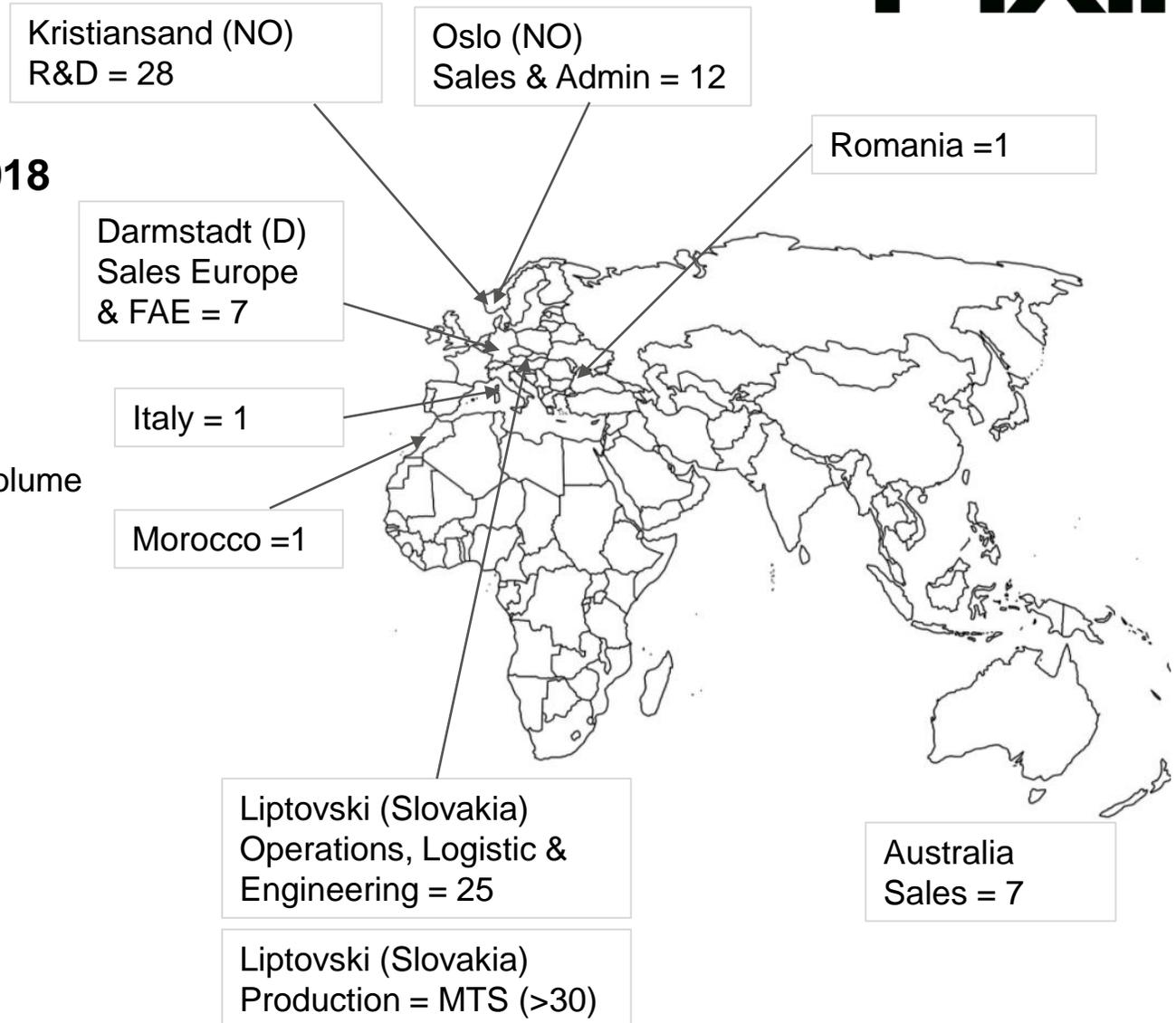
Who is Pixii

Norwegian Group established in March 2018

- ✓ > 90 power professionals
- ✓ 500 years accumulated experience from the power conversion & energy storage business
- ✓ Long experience in design of solar inverters and bi-directional modular power converters.
- ✓ Positioned for growth through advanced technology, volume ready supply chain and sales network.

Part of the Eltek Holding

- ✓ > 600 People
- ✓ > 400 M€ Revenue
- ✓ Active in > 30 countries



GLOBAL SETUP



• 75 EMPLOYEES (108 by end 2023)

• OFFICES IN 6 COUNTRIES, AND EXPANDING

DESCRIPTION

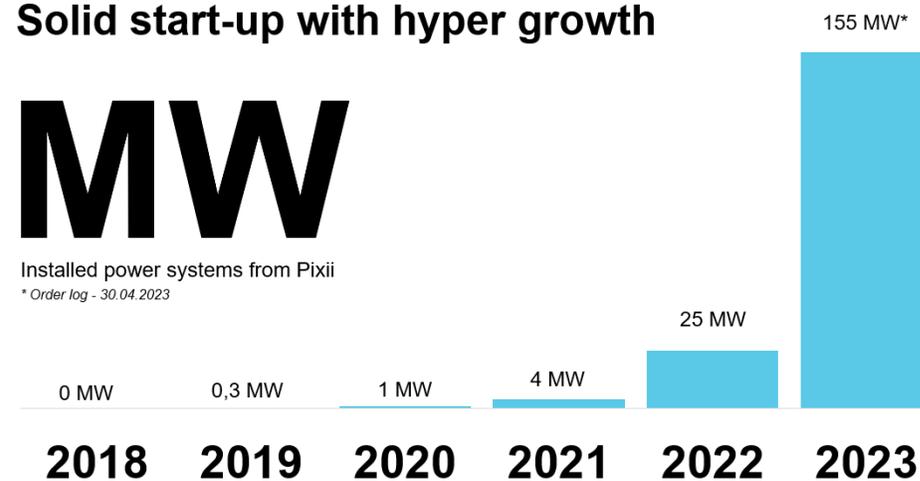
- OFFICES
- R&D
- MANUFACTURING
- INSTALLATIONS
- DISTRIBUTORS/PARTNERS

Solid start-up with hyper growth

MW

Installed power systems from Pixii

* Order log - 30.04.2023

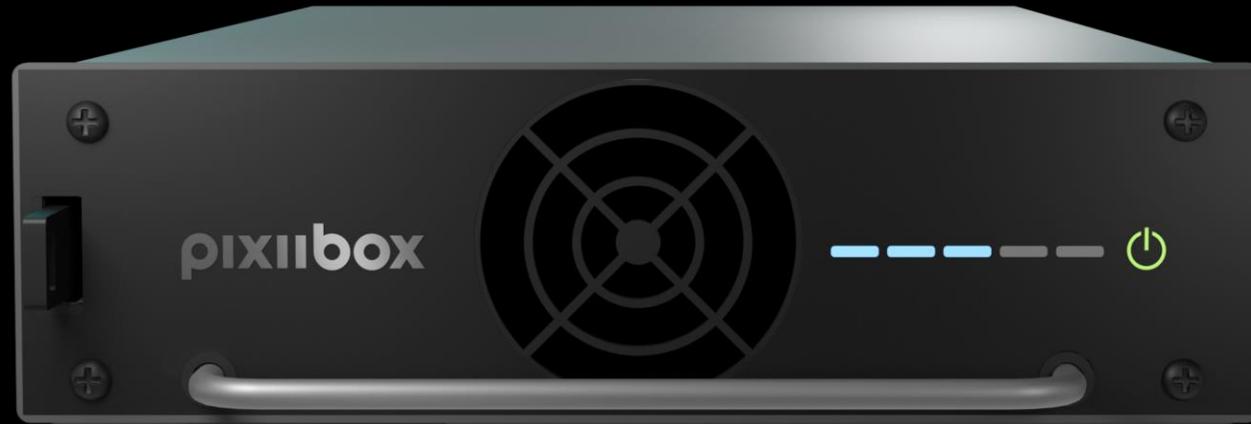




● ●
PIXII

Providing smart, modular and scalable battery based energy storage solutions, enabling the green transition

Pixii core technology



The **pixiibox**

A multipurpose, software defined, technology platform

One technology platform – software defined products



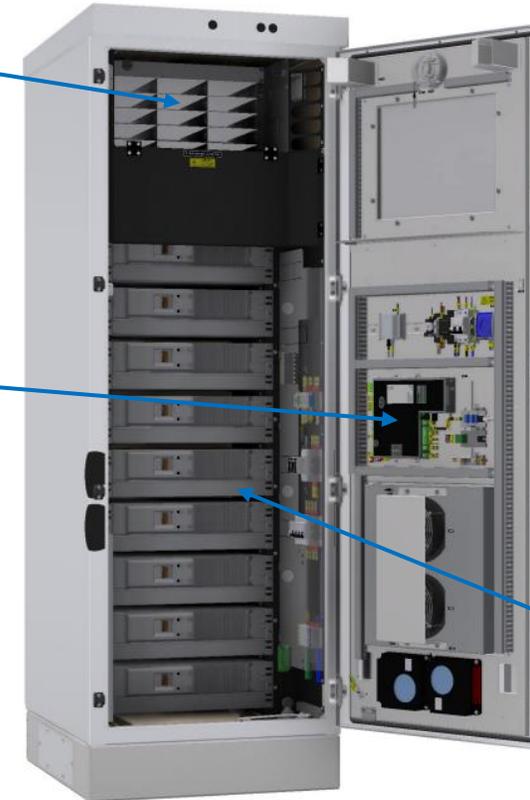
Pixii components and systems: a modular and scalable concept

Storage systems
3,3-50kW / 5-120kWh

Bi-directional 3.3kW
AC/DC power converter
PixiiBox



Gateway &
Application controller



3rd party batteries



Technology platform – for all application

for capacities 20kW / 20kWh ... 5MW / 30 MWh



50kW/50kWh
40kW/120kWh



PixiiBox WR 3,33kW



600kW / 600kWh
480kW/1,44MWh



10+10kW/20kWh

One technology platform – many markets & applications



C&I



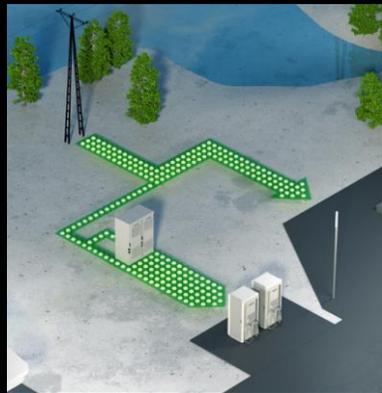
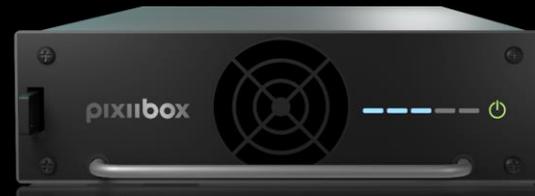
Residential



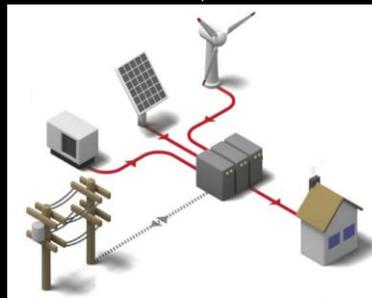
Telecom



Grid batteries



EV charging

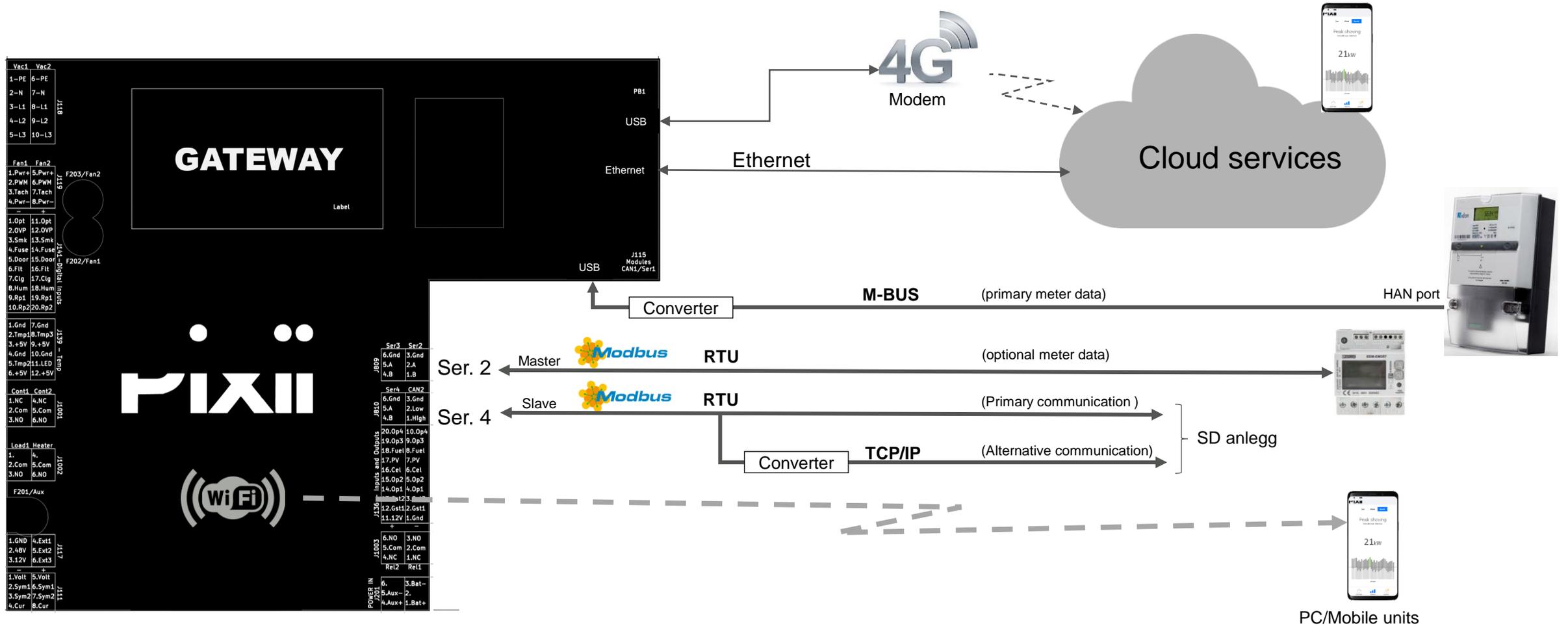


Micro-grids



Frequency response

“Multi-lingual” Gateway



INTEROPERABILITY

Enabled by Software strategy



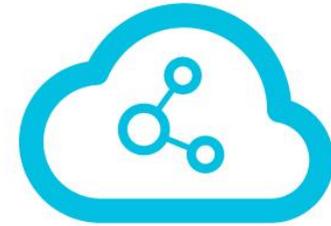
Module



Site gateway



Protocol

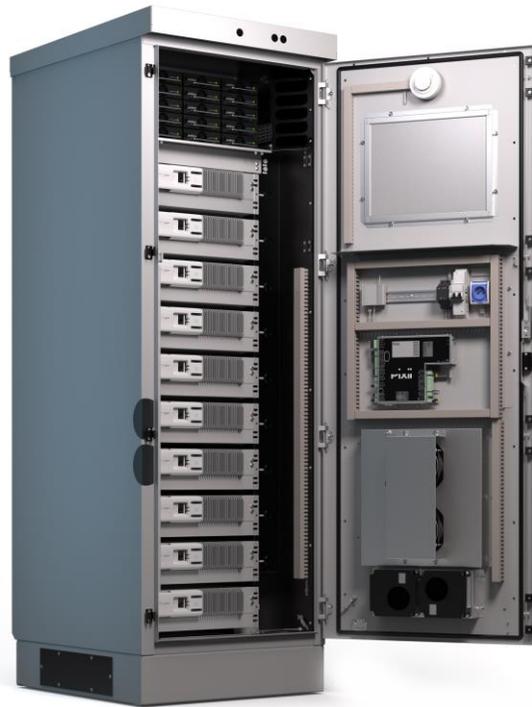


Fleet management

OWN IP

3.PARTY

PowerShaper2 or 50kW/50kWh, 40kW/120kWh



- 50kW
 - Up to 15 x PixiiBox 3,3kW
- 50kWh
 - Up to 10 x 5kWh LFP batteries

OR

- 40kW
 - Up to 15 x PixiiBox 3,3kW
- 120kWh
 - Up to 8 x 15kWh NMC batteries

PowerShaper2 Outdoor IP55

- Up to 50kW/50kWh LFP batteries
- Up to 40kW/120kWh NMC batteries



PowerShaper2 Indoor IP20

- Up to 50kW/50kWh LFP batteries



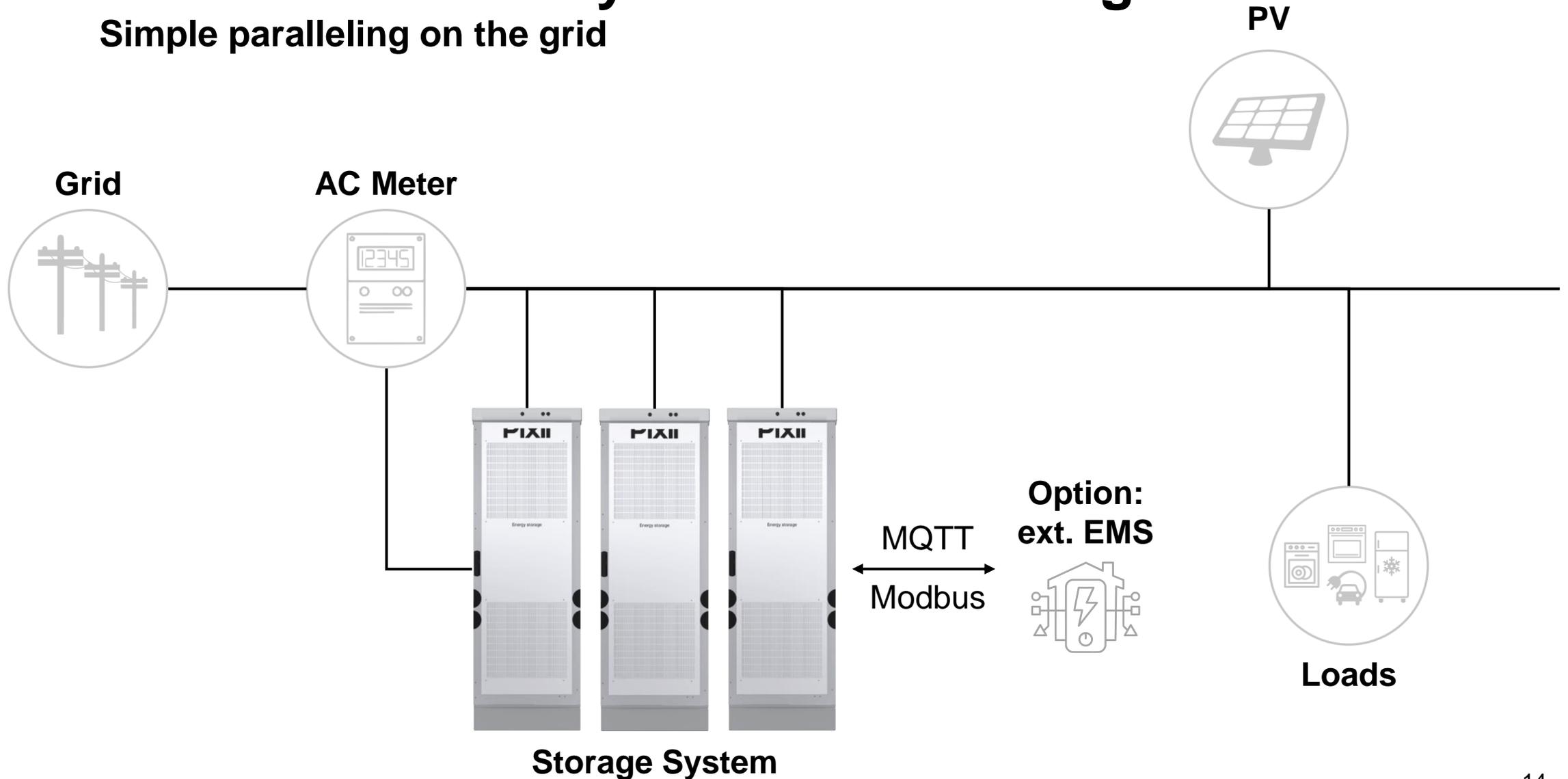
PowerShaper2 Indoor Low-C

- Up to 30kW/187kWh LFP batteries

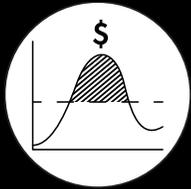


Modular Scalability into the MW Range

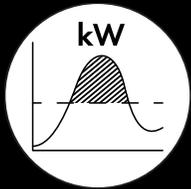
Simple paralleling on the grid



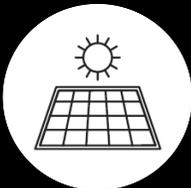
Wide range of applications



Time of use – optimal kWh cost



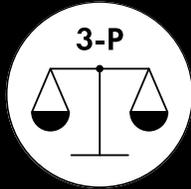
Peak shaving –
Demand charge reduction



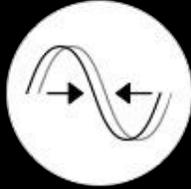
Own use of generated PV energy



Emergency power option



Phase balancing



Reactive power compensation

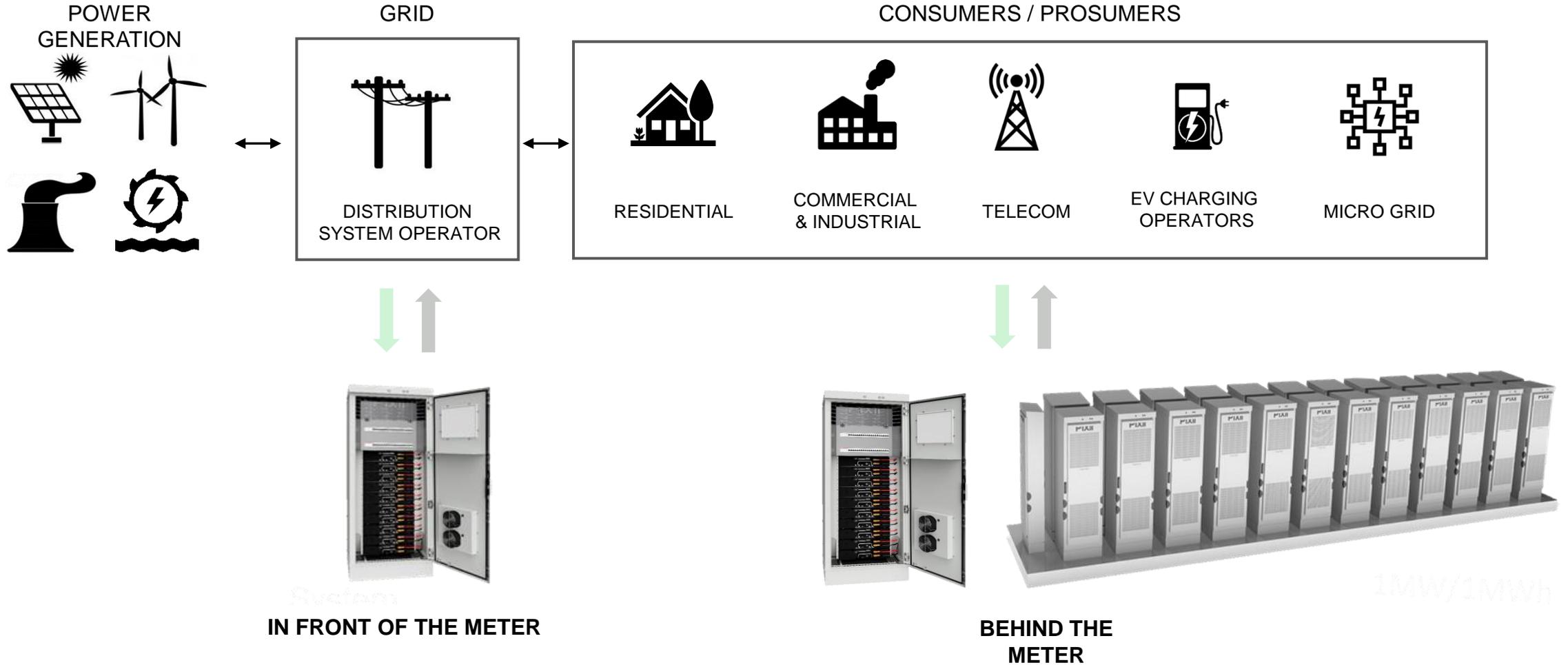


Voltage support

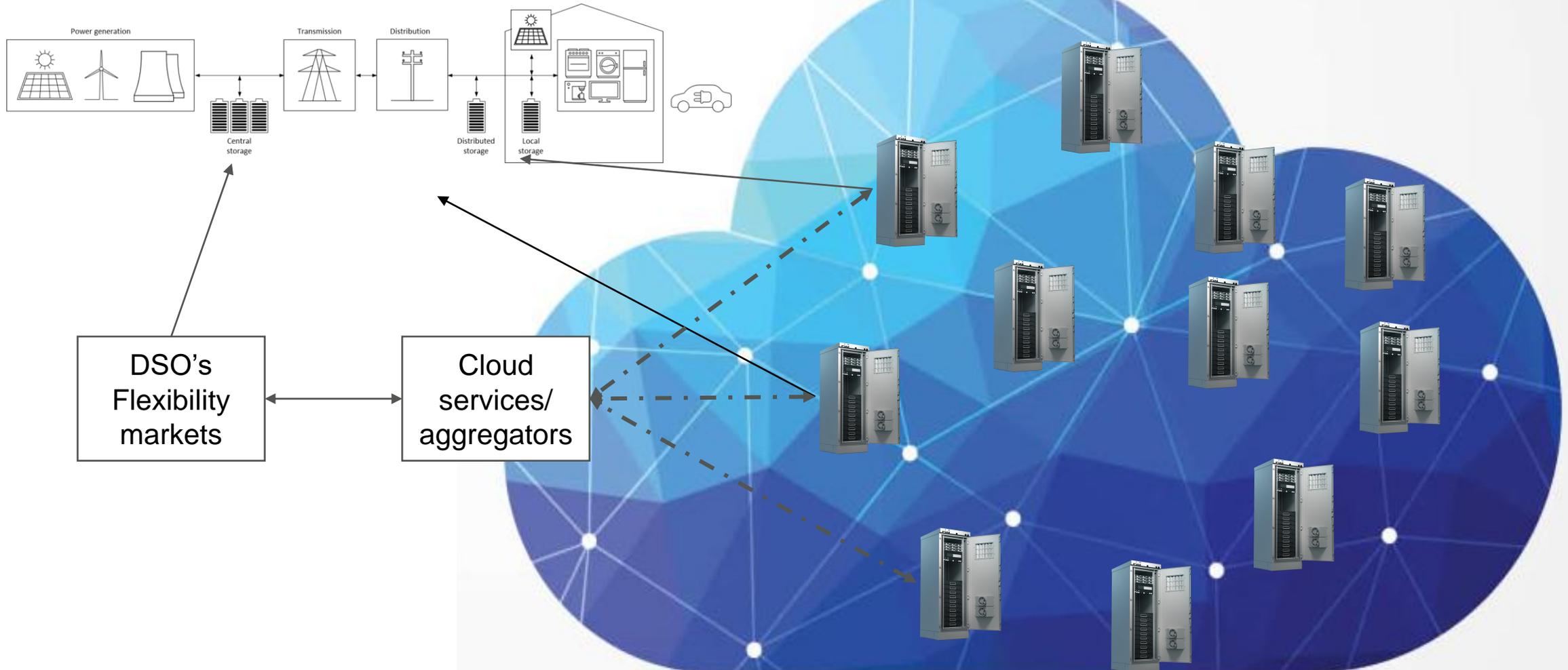


Frequency support

PIXII PROVIDES SMART ENERGY STORAGE AT THE «GRID EDGE»



The beauty of distributed energy storage

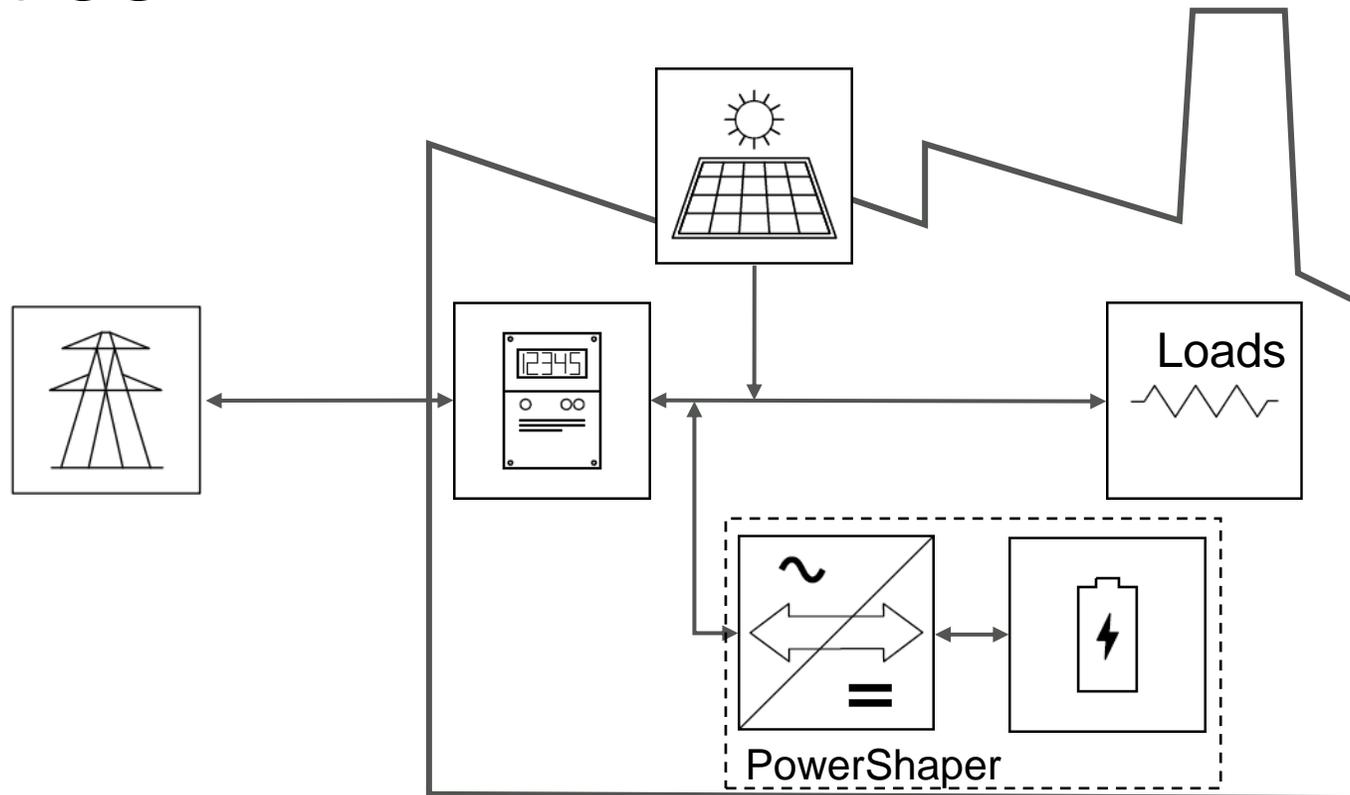




APPLICATIONS + CASE STUDIES

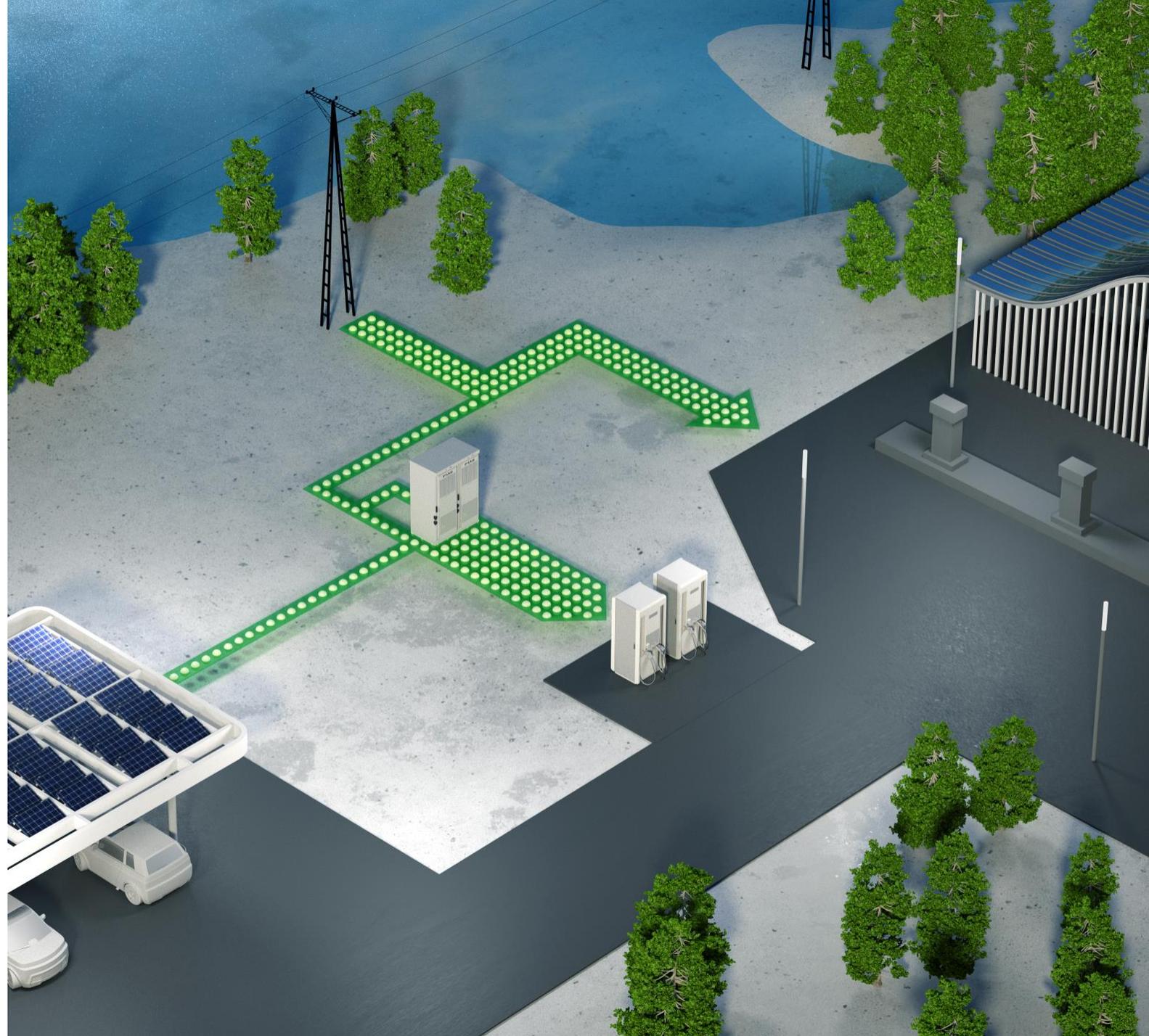
Housing developments, Commercial & Industrial facilities

- Demand charge reduction
- Increased self-consumption of PV
- Demand response/frequency reserves
- Reactive power compensation
- Back-up (Off grid functionality in Q4, 2020)



EV Charging

- Capacity increase
- Demand charge reductions
- Time-of-use
- Enabling simple integration of PV
- Grid support services
- Applicable for fast chargers or groups of “residential chargers”



EV-Charging stations

Example (300kW/300kWh) engineered by ElyWhere powered by Pixii

- Batteries to enable the required charging performance with existing grid connection
- Pixii's storage can limit grid power peaks to reduce monthly demand charge
- Multiply available peak kW capacity

City of Oslo (Norway)



Autodromo di Modena (Italy)



Grid-Batteries

Comment from Elvia on Pixii installation:

"Our experience with batteries in distribution networks shows that we can achieve significant cost reductions and new opportunities for environmentally friendly electrification."

Alf Tunheim:

Project Manager Research & Development
ELVIA - the largest DSO in Norway



How it looks like in the field



FFR installation 2022: 200kW/200kWh

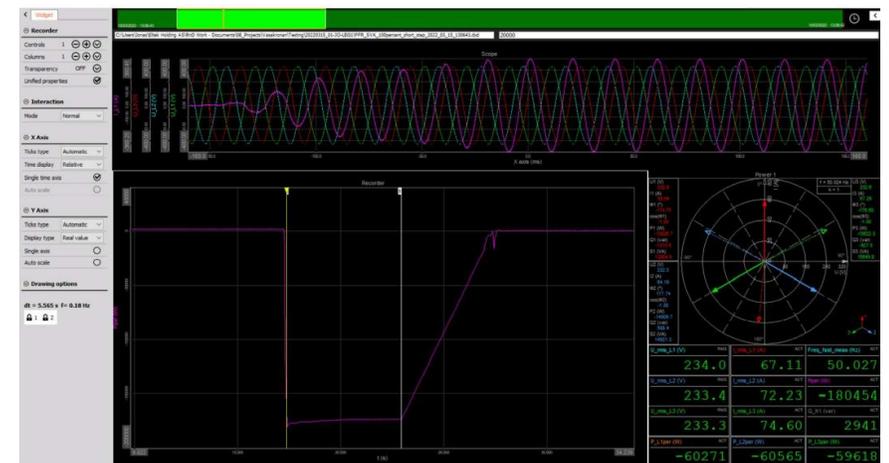


Figure 7 FFR activation at 49.50Hz on-site with synthetic frequency – overview

FCR - Frequency Containment Reserves

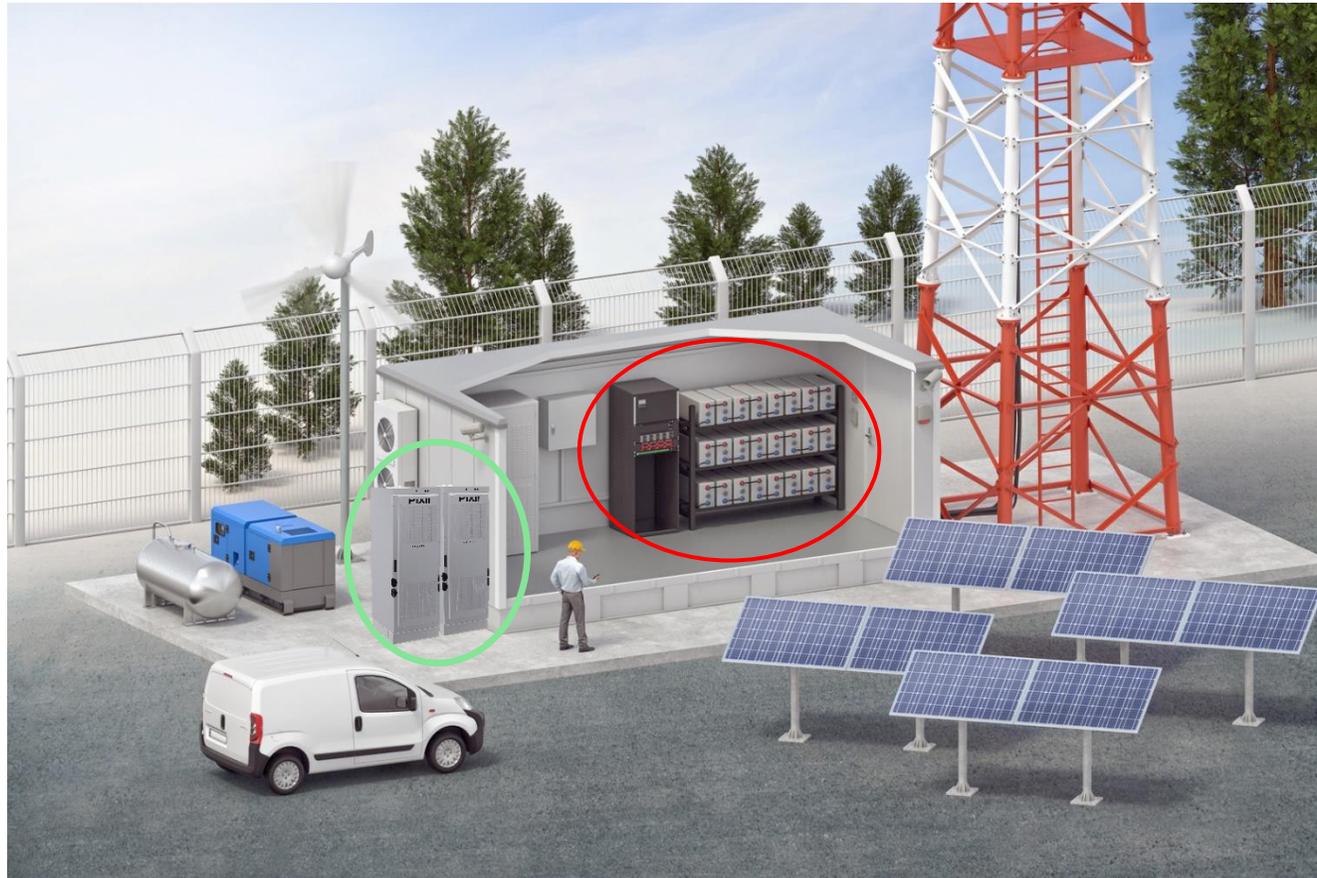
- Can be combined with other services to significantly improve return on investment
- Contract on 10MW under delivery



FCR installation - 300kW



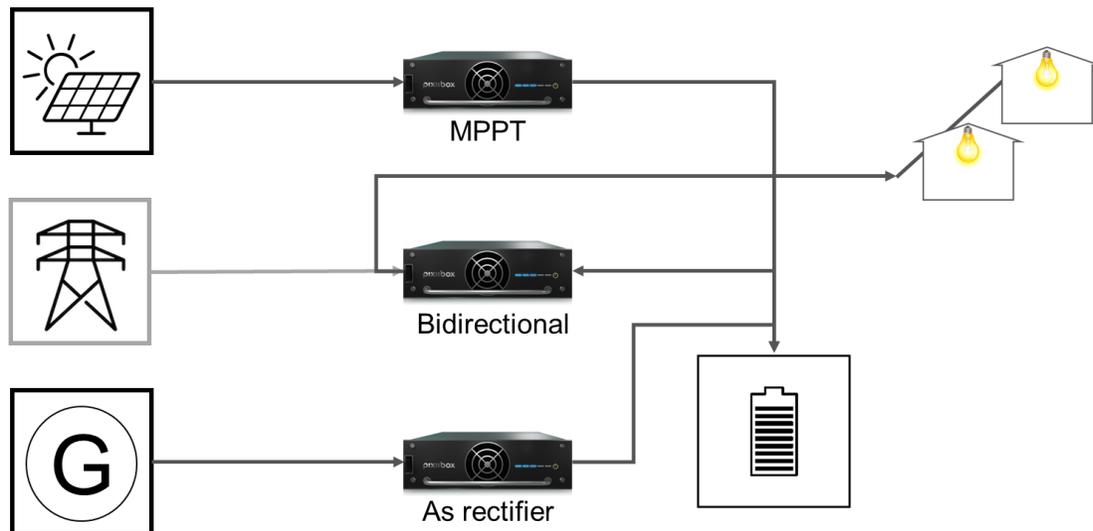
THE TELECOM AND INFRASTRUCTURE COMPANY OPPORTUNITY



- **Our telecom-power background provides a unique access to this industry.**
- Batteries are deployed for back-up only
“Sleeping Asset” - representing cost only
- Pixii’s solution (w/ 48V battery) can replace existing power & batteries + enable ancillary services.
- Utilizing **existing** infrastructure + shared facilities.
- Enables **significant** cost savings (aircon, free up space for core tech) and new revenue streams
- **A single telco-operator represents a revenue potential of > \$100 million for Pixii**

Microgrids

- Multifunction converter module
- On or off grid
- Seamless integration of energy sources



Confidential



Shaping the power of the future



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