



Balancing the Future

16.06.2025 Martin Nyborg

An aerial photograph of a dense green forest. A large, stylized letter 'E' is cut out of the center of the forest, revealing a lighter blue area underneath. The top horizontal bar of the 'E' contains a white icon of a battery with a tilde (~) inside, representing energy storage. The background is a lush green forest with some mist or smoke rising from the trees.

**We serve the worlds' growing need
for energy storage, speeding up the
transition to green energy**

Facts and figures



2018

Established Pixii in
Kristiansand, Norway



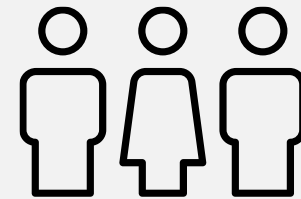
Tons

of experience in the power
conversion industry



>70

MUSD
revenue in 2023



>160

Employees
globally

50

Technology **Fast 50**
2023 NORWAY **WINNER**
Deloitte.

Pixii - Norway's
fastest-growing
tech company

• •
PIXII

no. 1



500

Technology **Fast 500**
2023 EMEA **WINNER**
Deloitte.

no. 9



PIXII

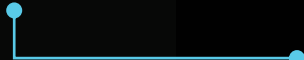
Abotopou tech

SOFTWARE DEFINED PRODUCTS

One hardware – many products



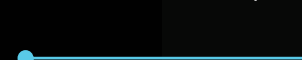
Bi-directional
inverter



Rectifier



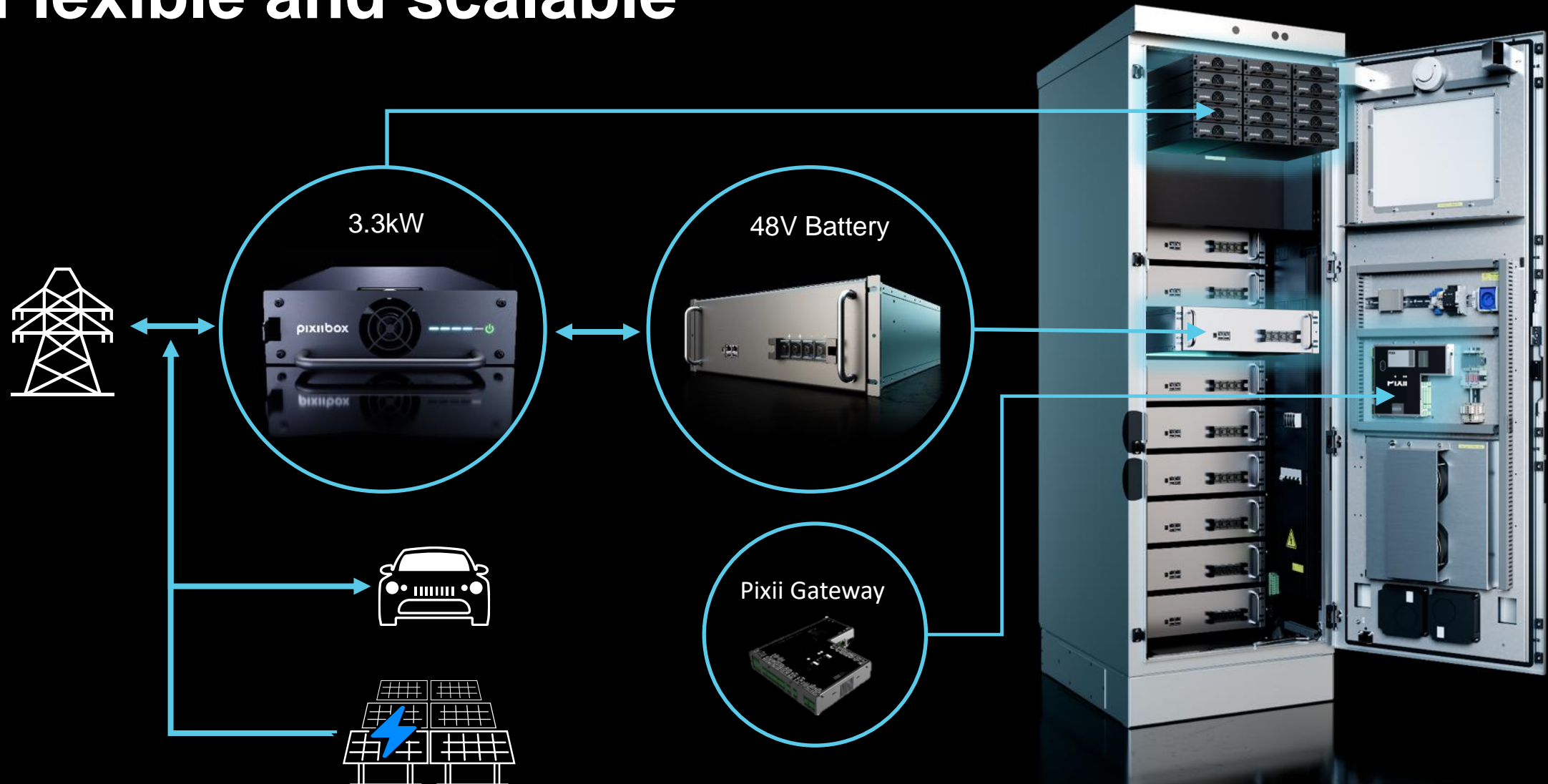
Solar converter
(MPPT)



Inverter



Flexible and scalable



PRODUCTS

o
mdular

MODULAR ENERGY STORAGE

One core module - wide range of products



PRODUCTS

PixiiMultiCabinet

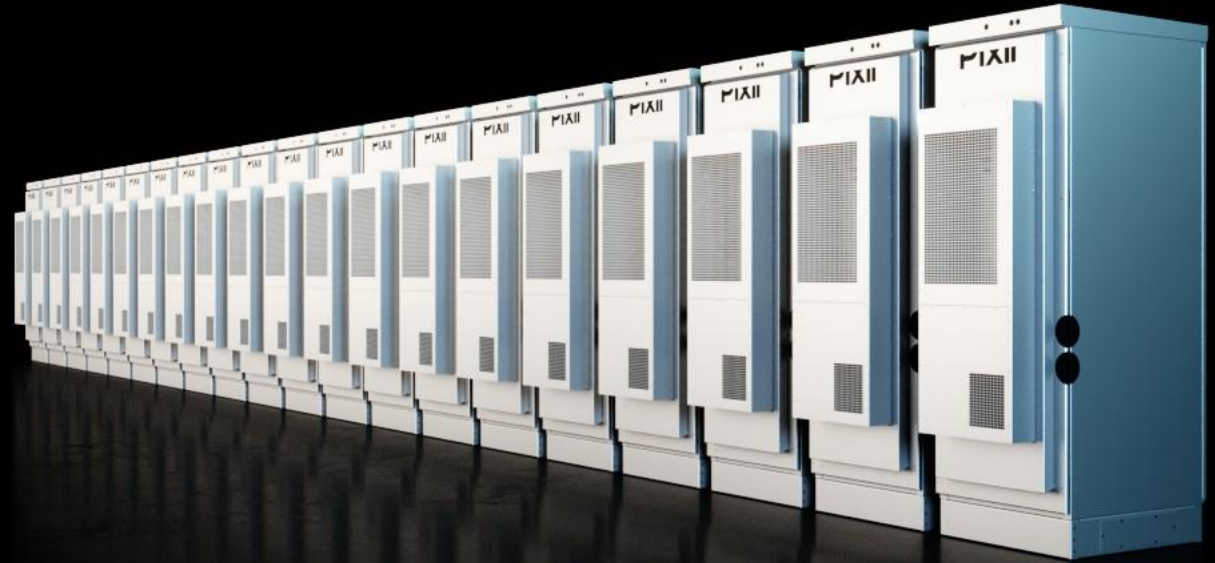
Electrify your business with a future proof battery energy storage system that allows you to scale seamlessly as you grow.

Output power:

1 160 kW

Key features

- Scalable up to 1 MW and beyond
- “Leader/follower” configuration
- Separate master Gateway for large systems
- Simple and flexible installation
- Fast response
- 48V battery voltage for ease of service



The beauty of distributed energy storage



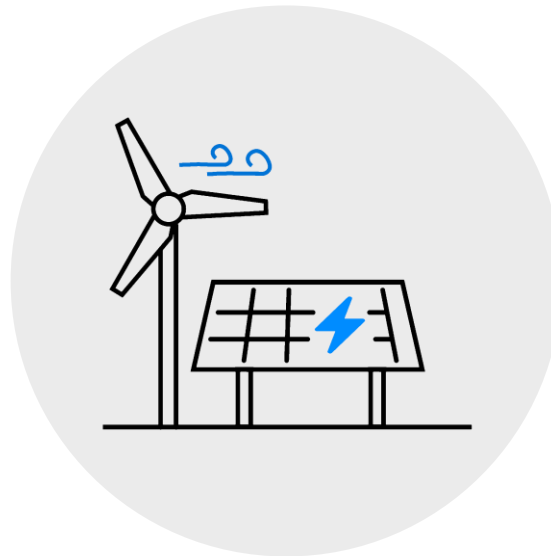
Distributed BESS

Combining behind the meter value
creation with power market
interaction and ancillary services

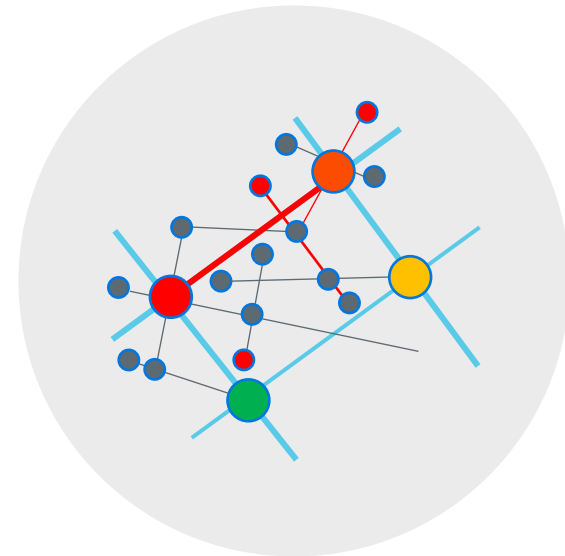
The Power System: Increasing Flexibility Needs



System Stability



Energy Utilization



Grid Utilization

Sjusjøen

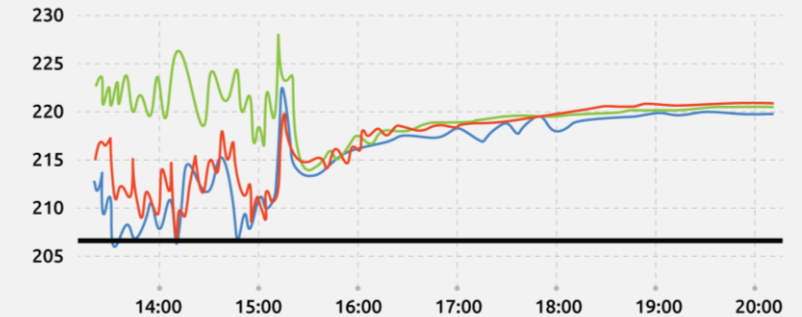
Elvia's grid at Sjusjøen was challenged by new loads such as electric vehicle chargers, which cause voltage imbalances.

Solution

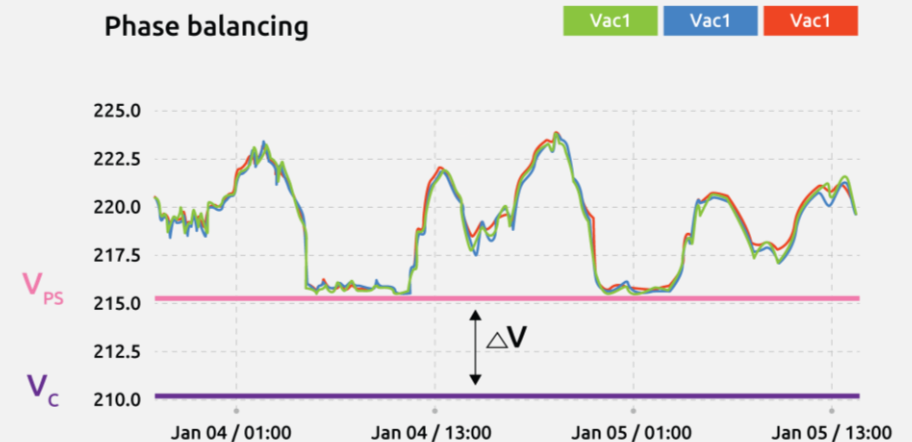
- Elvia installed a battery system operating in phase balancing mode and voltage support.

Result and Value

- A flexible and cost-effective solution that resolves the issue of phase imbalance.



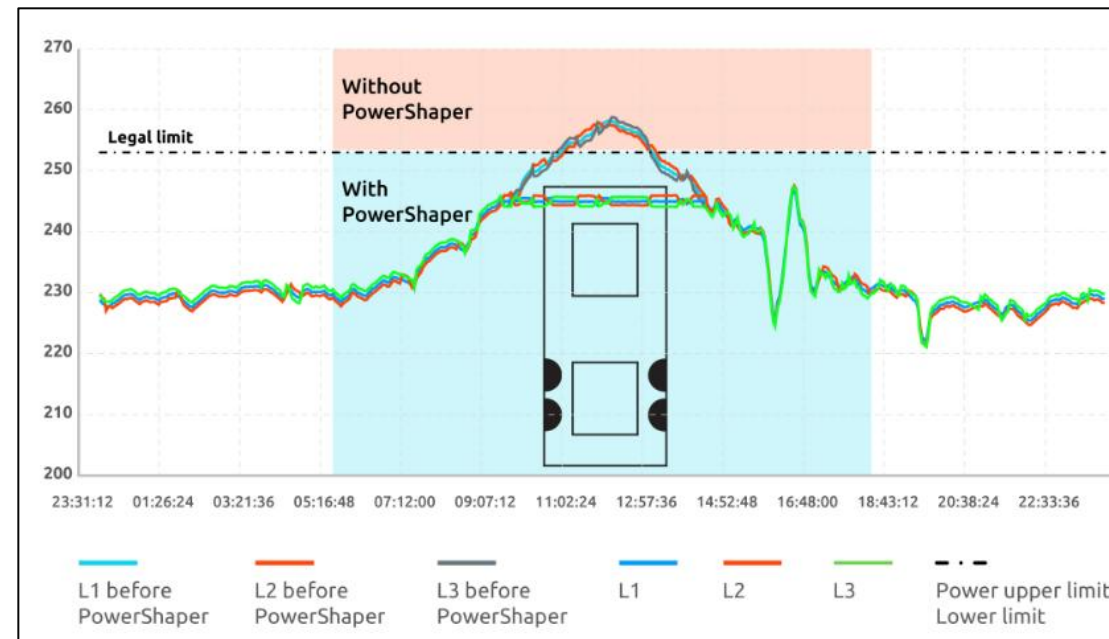
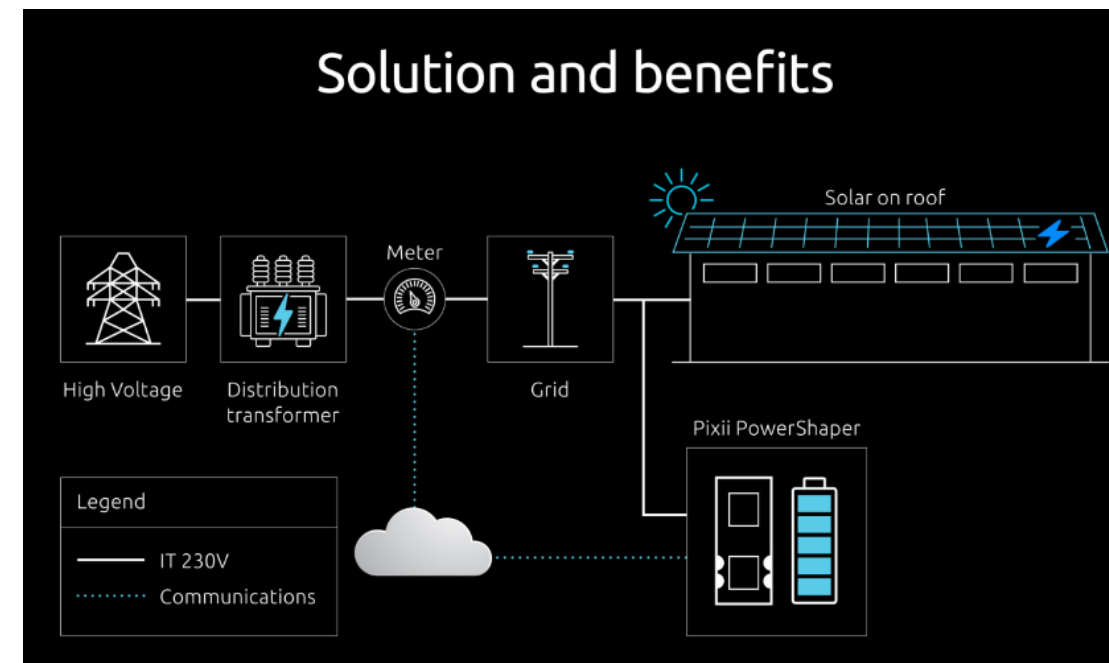
Phase balancing



Phase balancing & Active power compensation

LEDE: Batteries for Voltage Support

- Battery system limits high voltages on a farm with PV (solar panels)
- → Utilizes the existing grid more efficiently
- → Can also provide future revenue streams

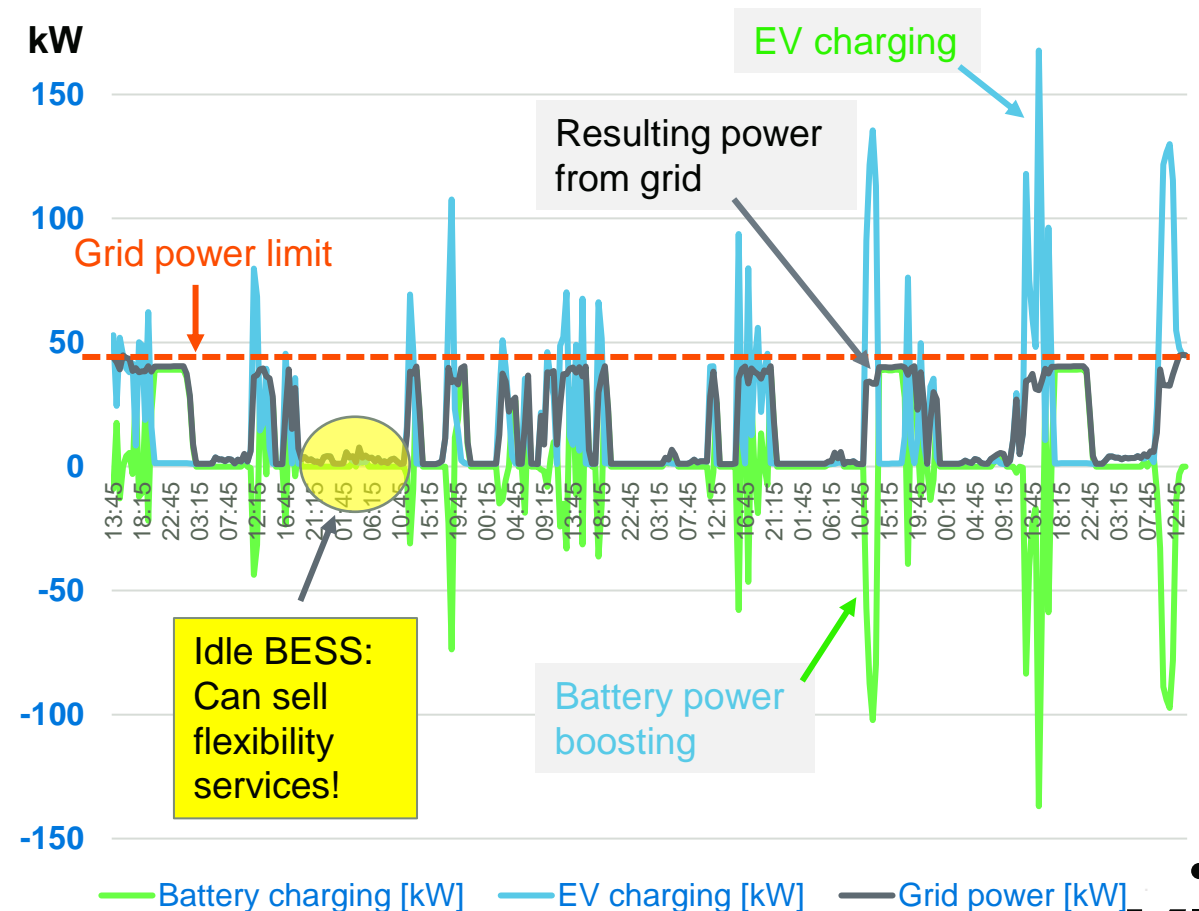
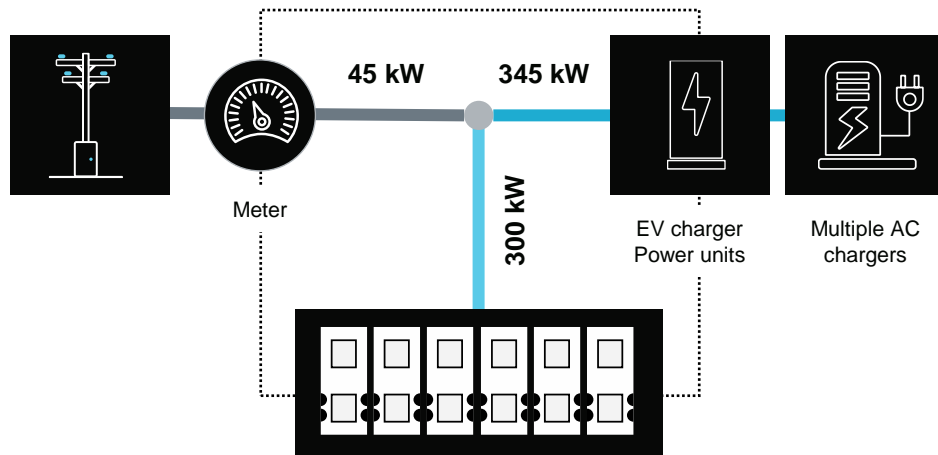


<https://youtu.be/CJulDeZRIR8>

<https://www.pixii.com/case-studies/cultivating-currents-lede-dso-sows-seeds-of-solar-success-with-pixii/>



Pixii BESS boosts EV charging power capacity beyond grid capacity



The image shows four stacks of coins on a dark, reflective surface. From left to right, the stacks increase in height. The first stack is the shortest, followed by two medium-height stacks, and the fourth is the tallest. Each stack is topped with a single coin. The coins appear to be of different denominations, with some showing distinct patterns. The background is a soft, out-of-focus blue gradient.

Dynamic value stacking

Generate income

Save money



Sell grid support services

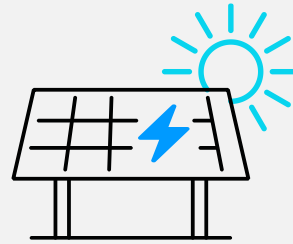
Support your local grid, through ancillary services:

- Frequency markets like FCR, FFR and FCAS.
- Voltage support
- Local flexibility markets



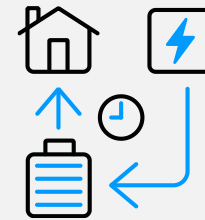
Sell your surplus Energy and trade stored energy

- Make money by selling your excess solar energy back to the grid.
- Trade stored energy in bulk to balance supply and demand.



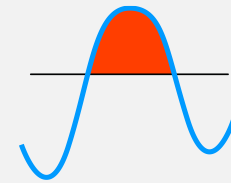
PV self-consumption

Store energy from the sun for self-consumption with free, clean, renewable energy throughout the day.



Arbitrage

Store energy from the grid when it's cheap to use when electricity cost is high.



Peak shaving / Power boost

- Cut service fees to grid supplier by shaving off the peaks of your consumption.
- Power boost: Handle short-term spikes in demand without overloading the grid



- **High potential sector**
- **Innovation Race**
- **Global Sourcing**



An aerial photograph of a dense forest. A large, silver metal power line tower stands in the center-right of the frame. Several high-voltage power lines stretch from the tower across the forest canopy towards the top-left corner. The forest is composed of various types of trees, with some showing early autumn colors of yellow and orange. The ground is mostly covered in green foliage, with some bare patches visible near the tower.

Case studies



Pure power – wastewater treatment + solar + storage

Hünfeld, Germany – DSO/DNSP

PowerBase XL (540 kW/1.39 MWh) stores solar energy to power wastewater treatments at night.

<https://www.pixii.com/case-studies/pure-power-pixii-maximizes-solar-energy-for-smarter-wastewater-treatment/>



Innovating the future of EV charging

Norway (Circle K + Elywhere) – EV Charging 60-70 cars daily
300 kW system for smart EV charging, peak shaving, power boost and arbitrage.

<https://www.pixii.com/case-studies/innovating-the-future-of-ev-charging/>



Charging ahead – e-truck solution

Venlo, Netherlands – EV Charging

520 kW / 1.1 MWh BESS supporting 4x400 kW chargers for fast e-truck turnarounds.

<https://www.pixii.com/case-studies/charging-ahead-milence-and-pixiis-solution-for-e-truck-charging/>



Supercharging progress – scalable EV charging

TSG + Pixii – EV Charging

150 kW / 150 kWh modular BESS demonstrated for grid capacity boost.

<https://www.pixii.com/case-studies/supercharging-progress-tsg-partners-with-pixii-for-scalable-ev-charging-solutions/>



Making waves – Bondi Beach community battery

Bondi Beach, Australia – Community

160 kW / 496 kWh Community BESS stores local solar energy, stabilizes grid & supports EV charging.

<https://www.pixii.com/case-studies/making-waves-bondi-beach-powers-ahead-with-pixii-community-battery/>



Revolutionizing energy management - Meny Revetal

Norway– Commercial and Industrial

00 kWp solar PV + Pixii PowerShaper BESS (1 MW/1 MWh) solar storage, peak shaving, grid support, and participation in frequency reserve markets.

<https://www.pixii.com/case-studies/revolutionizing-energy-management-meny-revetals-journey-to-sustainable-power/>



ENGIE Slovakia – From Grid Strain to Energy Gain

Vel'ká Ida, Slovakia – Commercial & Grid Service

1.25 MW modular BESS provides Frequency Control Reserve (FCR), responding within 30 s via 110 kV substation

<https://www.pixii.com/case-studies/from-grid-strain-to-energy-gain-how-engie-is-powering-slovakias-clean-energy-with-pixii/>



Leading the charge – Greenbat energy storage

Slovakia – C&I / Grid services

First primary-frequency-regulation certified BESS in V4; 5.15 MW / 5.1 MWh.

<https://www.pixii.com/case-studies/leading-the-charge-how-greenbat-and-pixii-revolutionized-energy-storage-in-slovakia/>

Our webinar series details how you can use the Pixii BESS to make your case profitable

With: **flextools**



PAST

WEBINAR: DSO/DNSP
Unleashing the Potential of BESS in Power Balancing Markets with Flextools

<https://www.pixii.com/event/unleashing-the-potential-of-bess-in-power-balancing-markets/>

With: **TGN Energy**




PAST

WEBINAR: COMMERCIAL AND INDUSTRIAL
BESS Value Stacking: maximizing ROI in C&I sector with TGN Energy

<https://www.pixii.com/event/bess-value-stacking-maximizing-roi-in-ci-sector/>


With: **FLEX=CHARGE**



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WEBINAR: EV CHARGING
BESS and EV infrastructure: challenges and opportunities

<https://www.pixii.com/event/bess-and-ev-infrastructure-challenges-and-opportunities/>



PAST

WEBINAR: ACADEMIC, DSO/DNSP, EV CHARGING
Optimizing ROI with dynamic value stacking

<https://www.pixii.com/event/optimizing-roi-with-dynamic-value-stacking/>

MODULAR ENERGY STORAGE

Flexibility made simple

