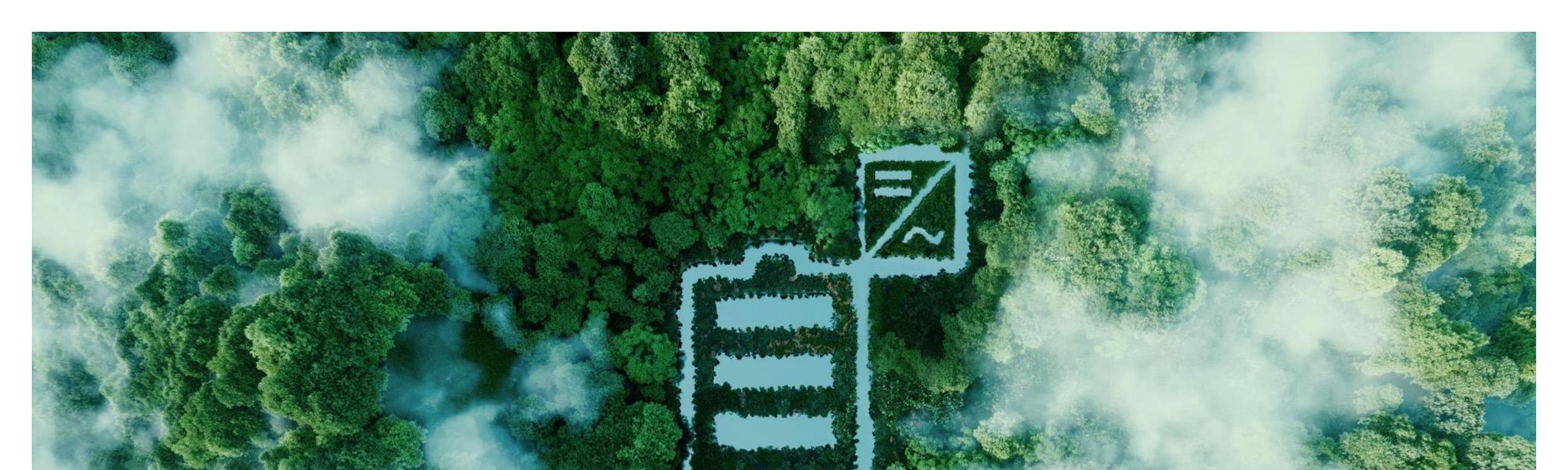




# Balancing the Future

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 clear blue sky. Inside the top horizontal bar of the 'E', there is a white icon of a battery with a diagonal slash through it and a sine wave below it, representing energy storage and green energy. The forest is partially shrouded in mist or low clouds, creating a soft, ethereal atmosphere.

**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



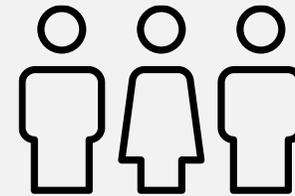
**Tons**

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



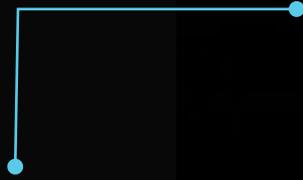
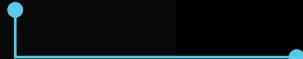
Αβ ο | ο u  
t e c h

SOFTWARE DEFINED PRODUCTS

# One hardware – many products



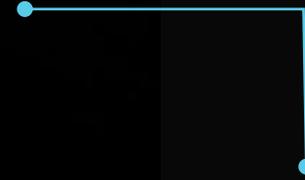
Bi-directional  
inverter



Rectifier



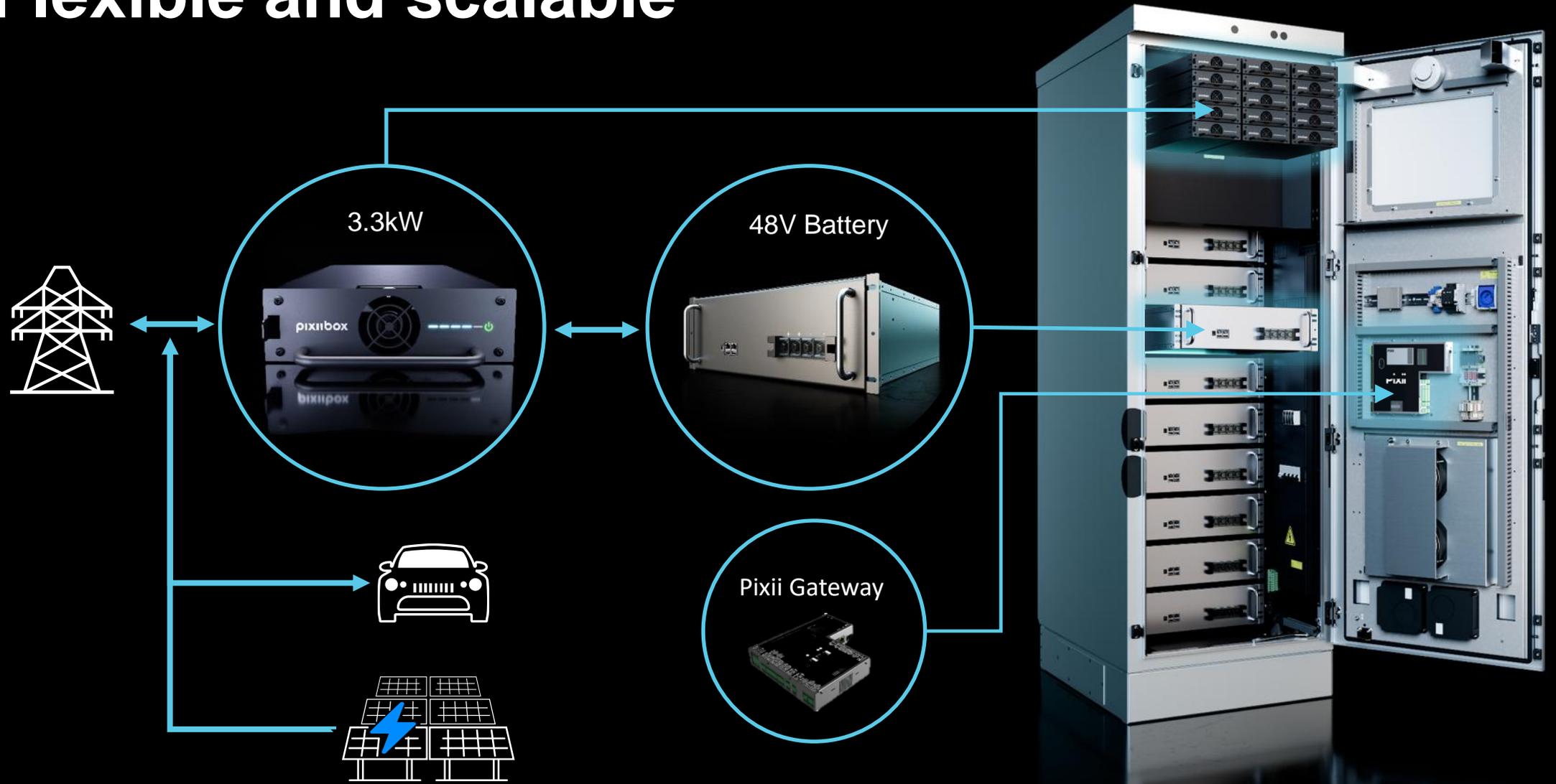
Solar converter  
(MPPT)



Inverter



# Flexible and scalable



PRODUCTS

o  
mdular

MODULAR ENERGY STORAGE

# One core module - wide range of products



## PRODUCTS

# PixiiMultiCabinet

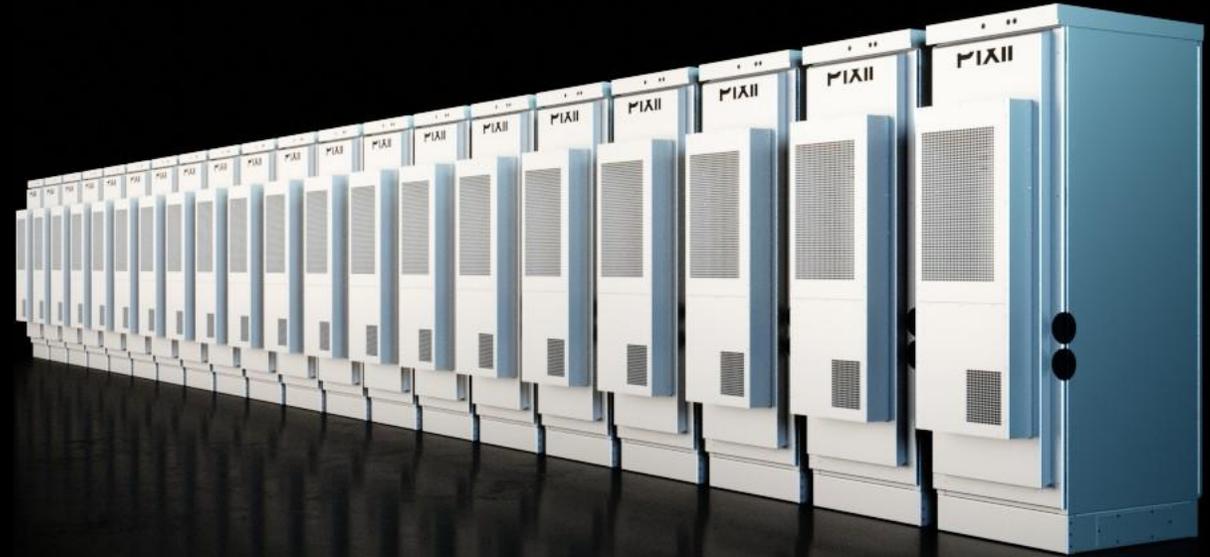
Electrify your business with a future proof battery energy storage system that allows you to scale seamlessly as you grow.

Output power:

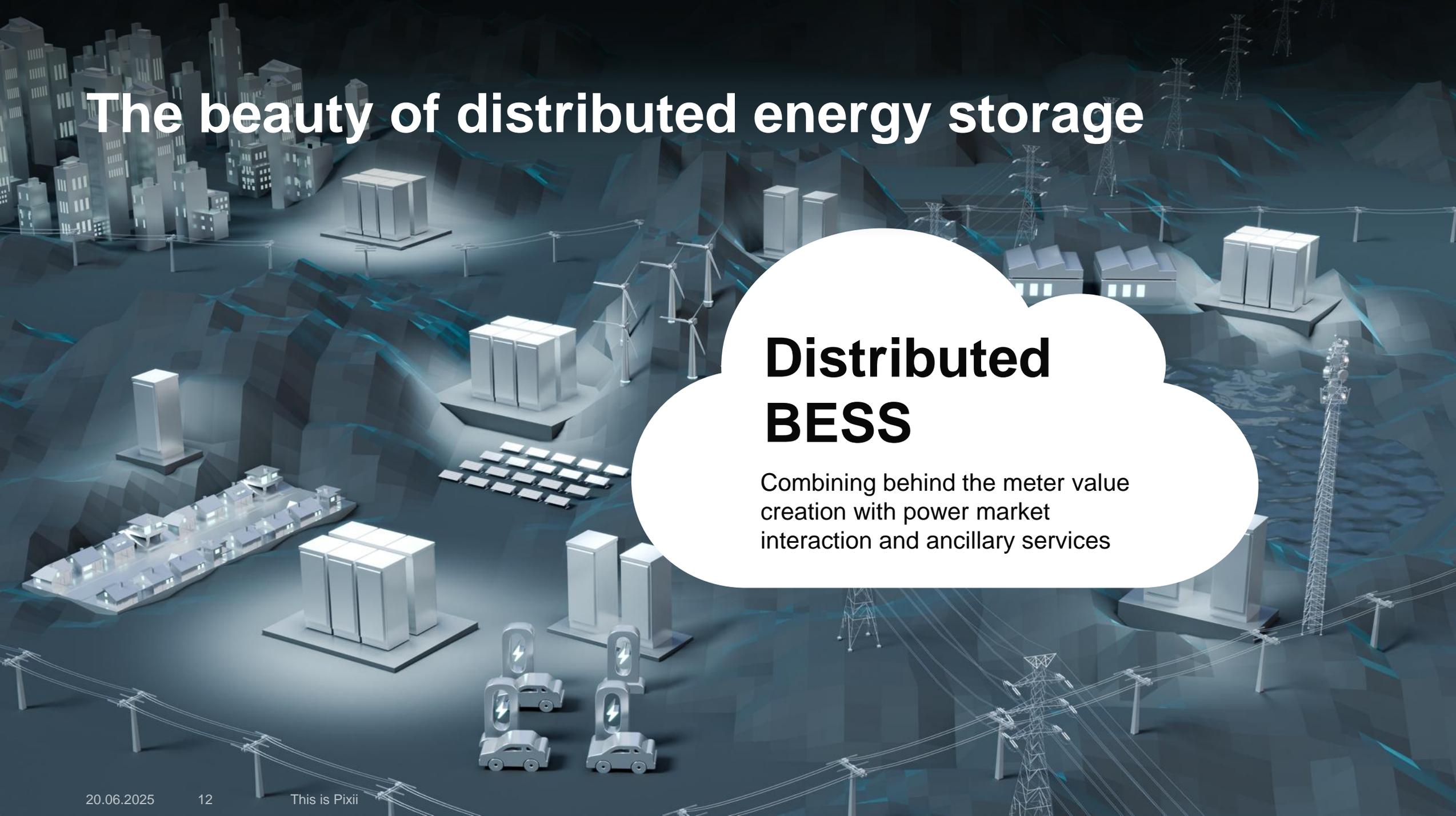
**1 160 kW**

## 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

A 3D rendered scene of a city and power grid. The scene is set in a dark, low-poly environment with a blue and grey color palette. In the background, there are several tall buildings representing a city. In the foreground and middle ground, there are various energy storage units, including large rectangular blocks, smaller rectangular units, and solar panels. There are also wind turbines and power lines with pylons. The overall scene is illuminated with soft, ambient light, creating a futuristic and industrial atmosphere.

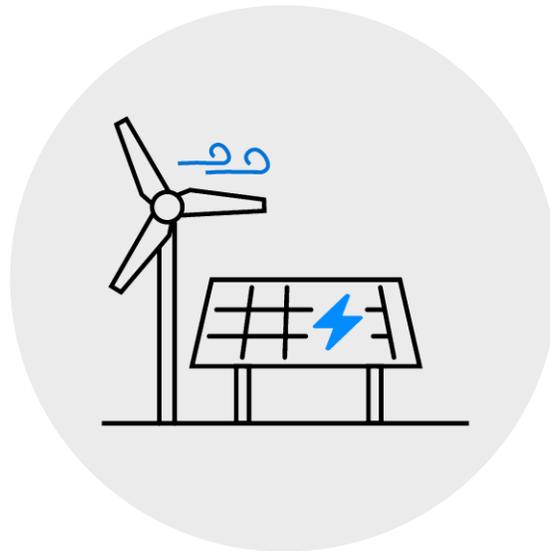
## Distributed BESS

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

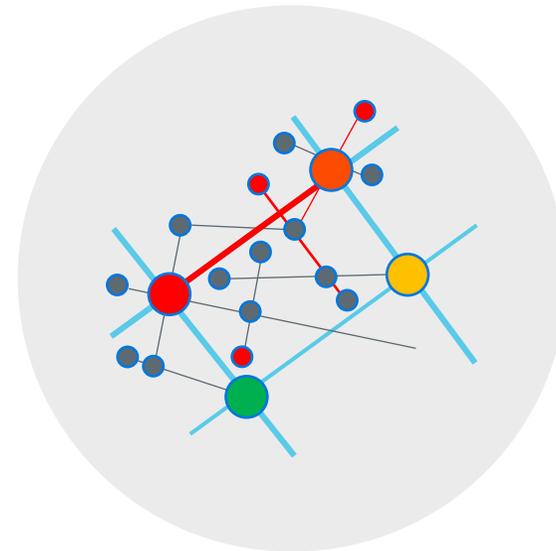
# The Power System: Increasing Flexibility Needs



System Stability



Energy Utilization



Grid Utilization

# Sjusjøen

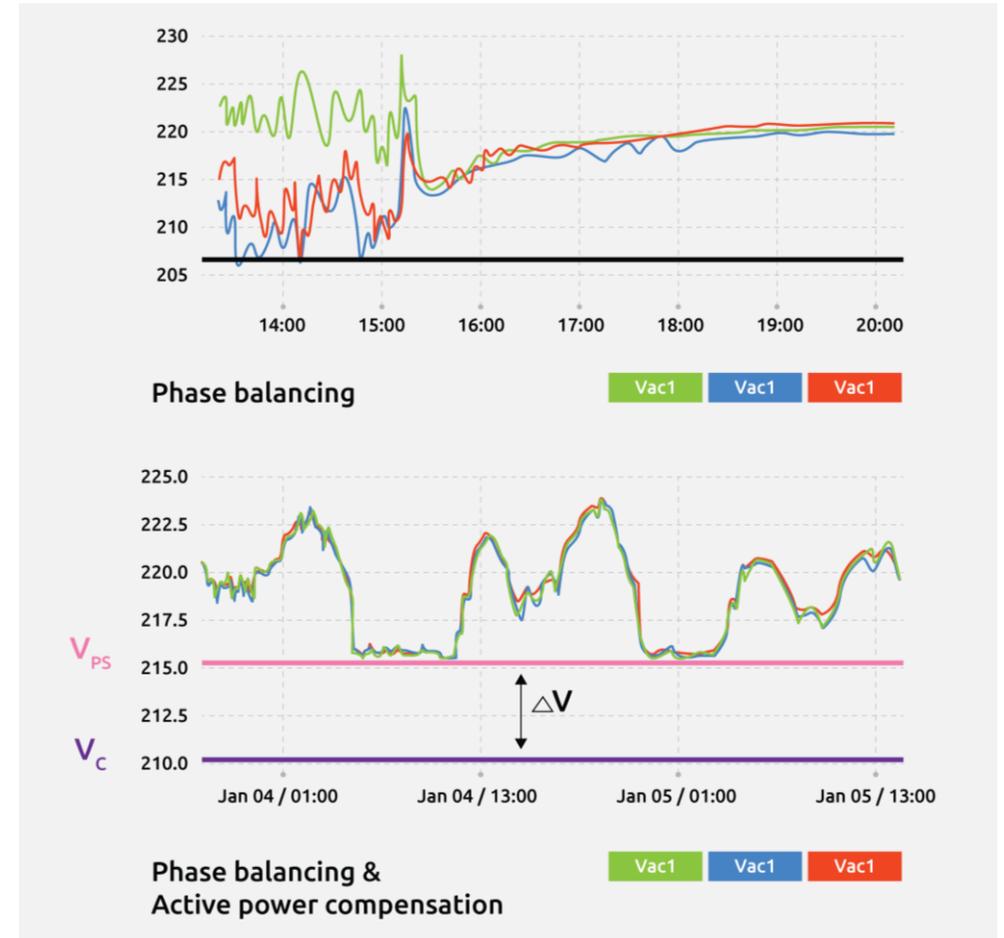
Elvia's grid at Sjusjøen was challenged by new loads such as electric vehicle chargers, which cause voltage imbalances.

## Solution

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

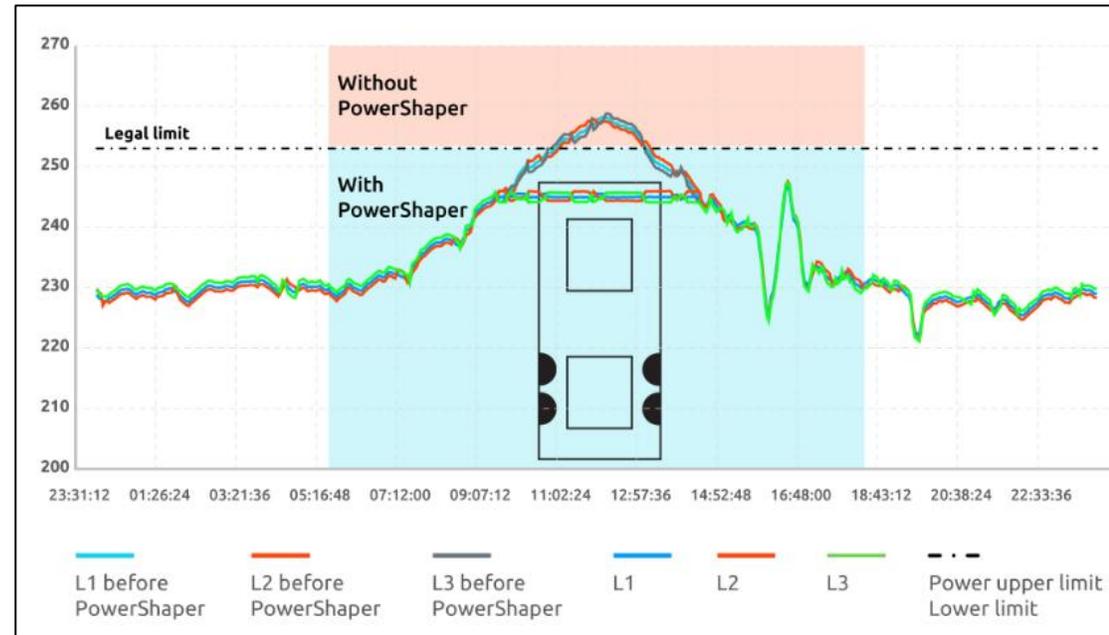
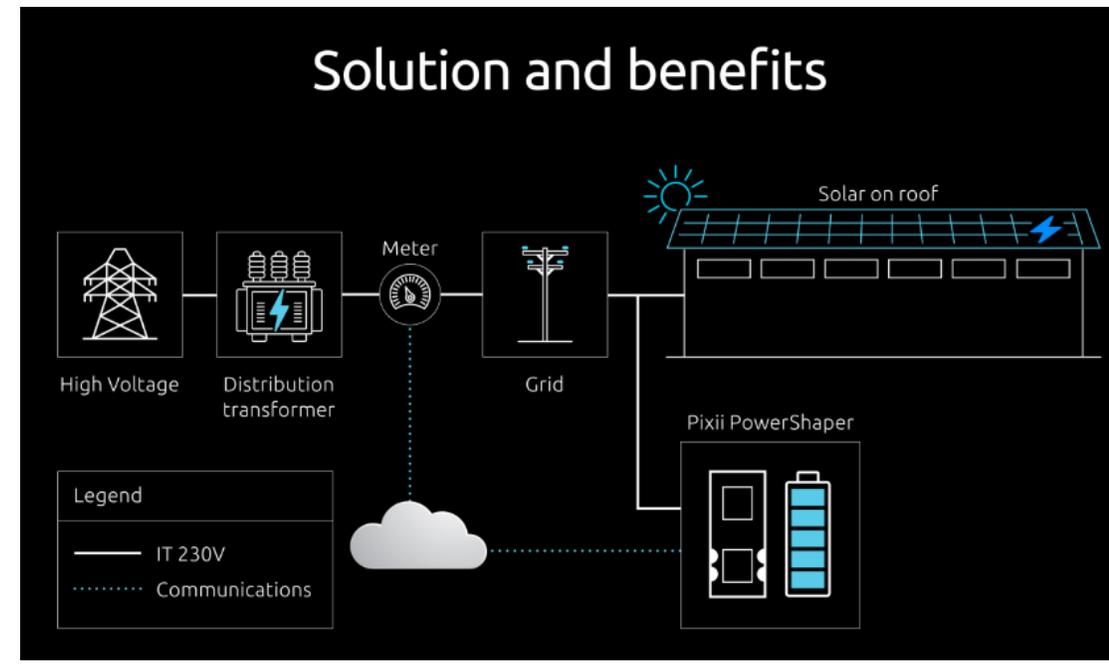
## Result and Value

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



# 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

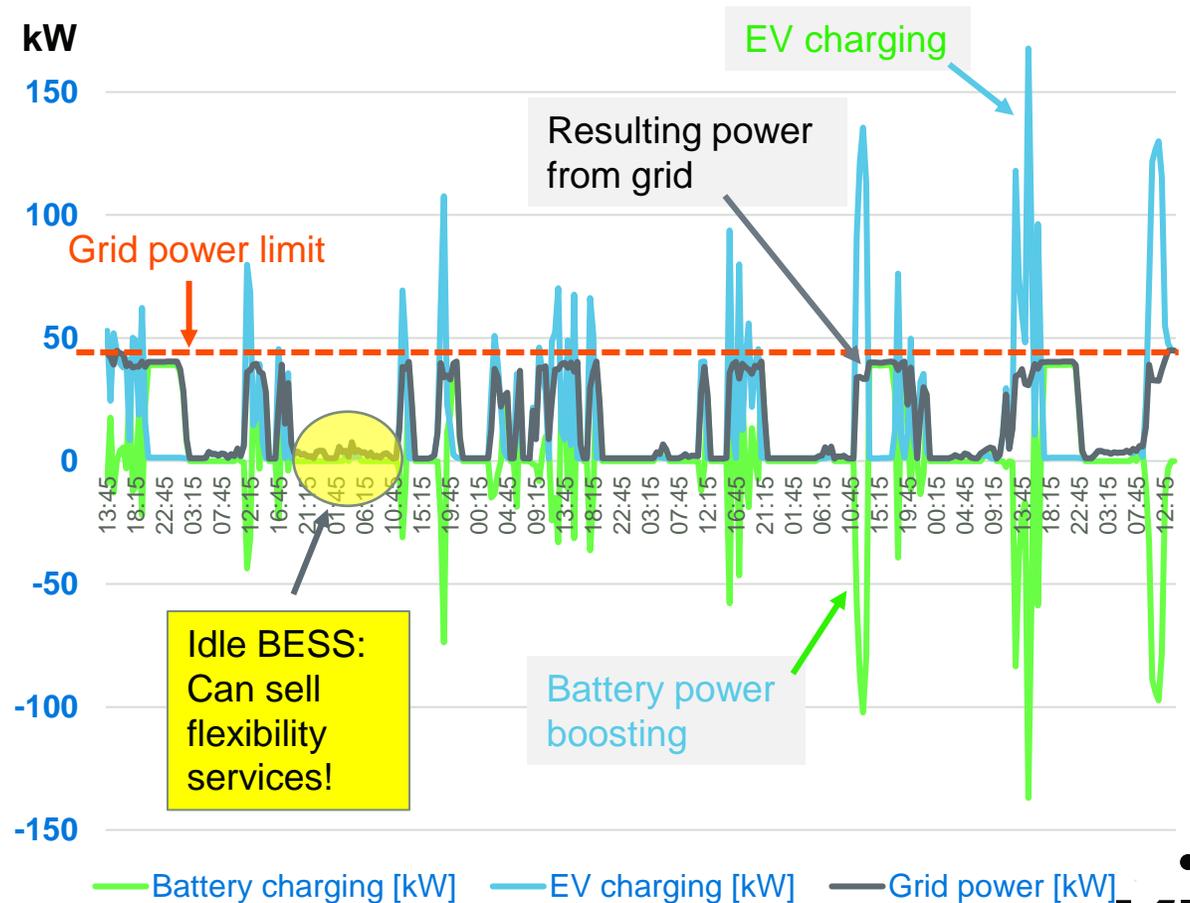
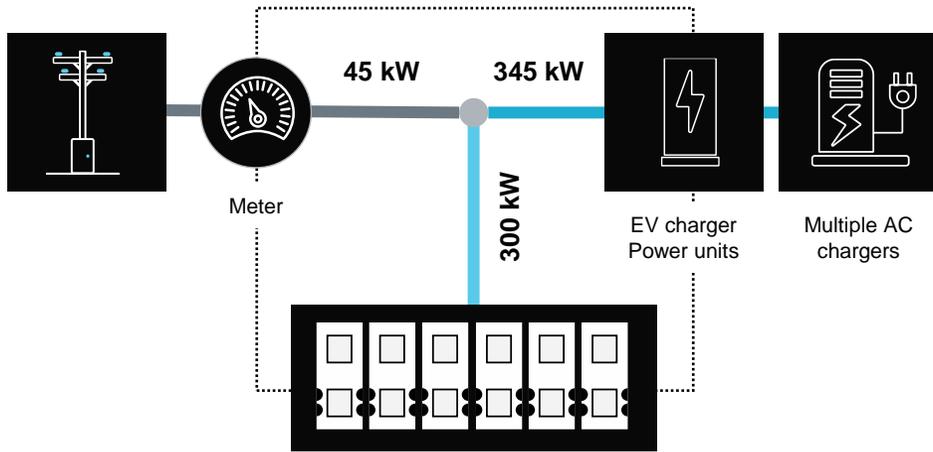


<https://youtu.be/CJulDeZRIR8>

<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 taller stacks, and the fourth is the tallest. The coins are primarily gold and silver in color. A semi-transparent dark blue horizontal band is overlaid across the middle of the image, containing the text 'Dynamic value stacking' in white. The background is a gradient of blue and grey.

# Dynamic value stacking

# Generate income

# Save money



Sell grid support services

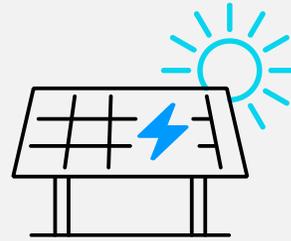
Support your local grid, through ancillary services:

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



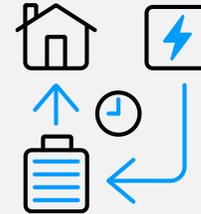
Sell your surplus Energy and trade stored energy

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



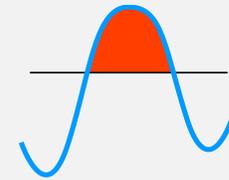
PV self-consumption

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



Arbitrage

Store energy from the grid when its 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 high-voltage power line tower situated in a dense forest. The tower is a lattice structure, and several power lines extend from it across the landscape. The forest is lush green, with some trees showing early autumn colors. The ground around the tower appears to be a cleared area or a small clearing.

# 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-pixiis-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**

Veľká 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**



PAST

**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

