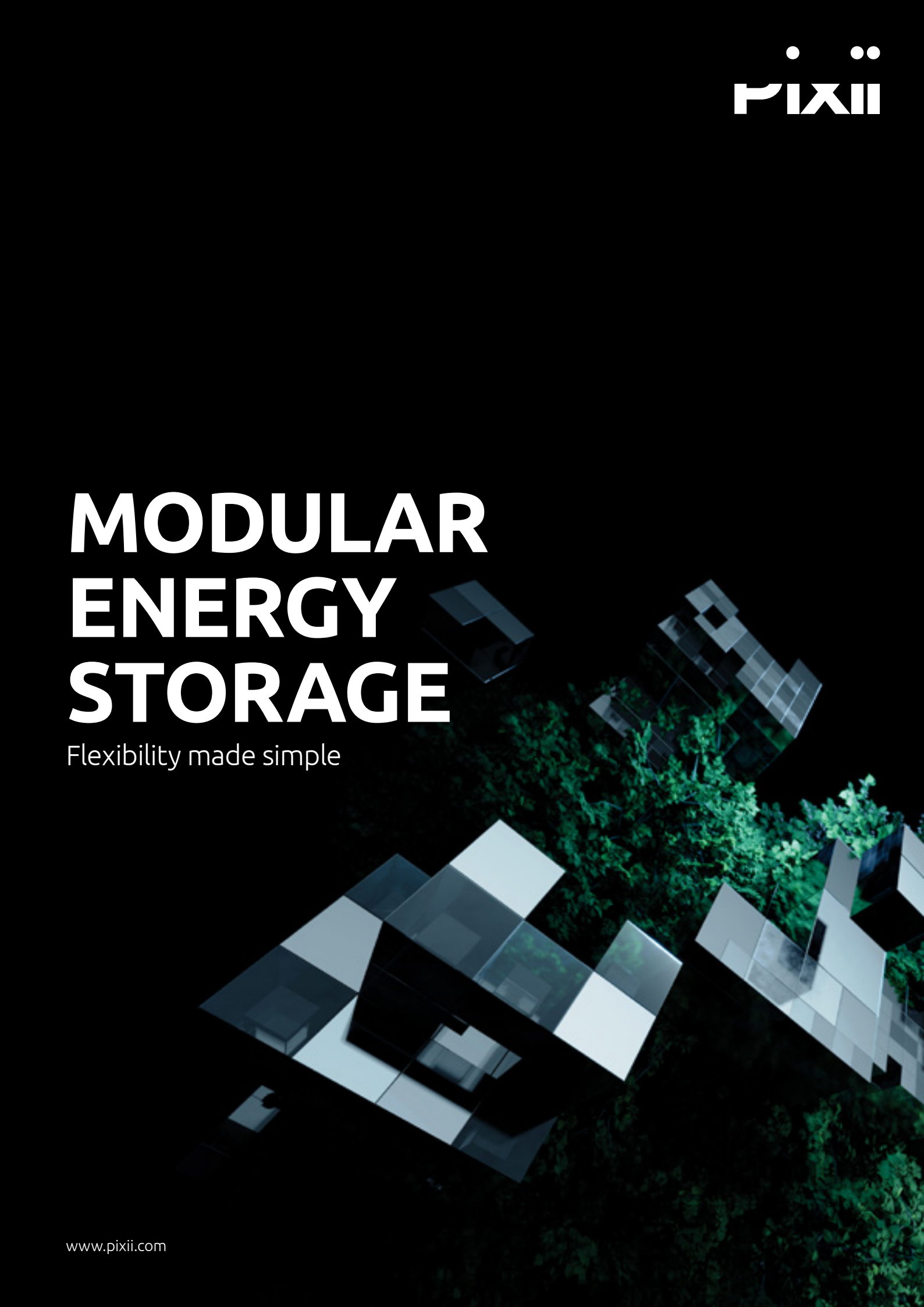
MODULAR ENERGY STORAGE

Flexibility made simple



www.pixii.com

MODULAR ENERGY STORAGE

We accelerate the shift toward green energy. With our modular approach, smart functionality, and unmatched scalability, our flexible energy storage solution adapts and expands to your evolving energy needs, making it the smart investment for a sustainable future.

INNOVATION ENABLING CHANGE

The electrification of our society is putting pressure on an already congested and unstable grid.

Our technology is revolutionizing the way energy is stored and used. It supports global initiatives like the UN's sustainability goals, the European Green Deal, and RE100. By helping homes and businesses optimize energy efficiency, we're playing a key role in reducing environmental impact.

The demand for clean, reliable energy sources has never been greater. Together with our partners and customers, we are committed to decarbonizing the energy sector and creating lasting, meaningful change for a sustainable future.

PIXIIBOX INSIDE

The PixiiBox is the beating heart of our system. It can serve as a bi-directional inverter, solar converter and rectifier, all-in-one box. The PixiiBox can perform a wide range of functions, including peak shaving, PV self-consumption, frequency support, phase balancing, and more, giving you unrivalled flexibility.

SAVE COST

- Arbitrage
- Peak shaving
- PV self-consumption
- Backup power

GENERATE INCOME

- Wholesale electricity trading
- Frequency markets
- Local flexibility market
- Voltage support

BOOST POWER

- Active power compensation
- Phase balancing
- Peak shaving

SUPPORT THE GRID

- Frequency support
- Voltage support
- Phase balancing

PIXIIBOX INSIDE

ALL IN ONE BOX

The PixiiBox is bi-directional, allowing the energy to flow from the grid to the battery and back to the grid, through the same power electronics.

It connects to a range of energy sources, like solar panels, the grid, generators, and more. It is software configurable and can be set to perform various functions, ensuring optimal performance and adaptability. And with our modular approach it's easy to scale your BESS by adding more modules, batteries, or cabinets.

The PixiiBox modules is stacked in 1U rows above the batteries in our PowerShaper. You can add more PixiiBoxes and cabinets as your energy need changes over time.

PixiiBox + Pixii Gateway

The Pixii Gateway is a built-in powerful controller, enabling you to connect with, monitor, and control all components within the system, as well as external sensors and other hardware at your site.

The Pixii Gateway allows you to configure a wide range of services, monitor and optimize performance, collect energy data, manage alarms, and take part in the electricity markets to open new revenue streams. It runs on Pixii OS, giving you full flexibility with MQTT and Modbus protocols, allowing you to integrate with 3rd party management software and connected hardware. The Pixii Gateway can act as an individual controller, or as a master, controlling a cluster of Pixii cabinets as one.

Now you can unlock a wide range of smart functionality, like arbitrage, peak shaving, PV self-consumption, frequency support, phase balancing, and more to optimize your system for your energy needs.

Pixii Gateway Web App

Pixii Gateway comes with a Web App for effortless setup, configuration, and advanced monitoring of your energy system. Access through any web browser directly at site over Wi-Fi or remotely through a VPN connection, eliminating the need for additional installation tools.

The Web App gives you real-time performance insights and historical data analysis, so that you can optimize cost savings and performance. Integrate seamlessly with site energy management systems for enhanced efficiency, and configure your power system to participate in virtual power plant initiatives.

Pixii Cloud

Pixii Cloud allows you to monitor your fleet of sites through a secure web connection, giving you a complete performance overview. Monitor and manage alarms, collect historical data, effectively reducing call-outs and maintenance cost, slashing your TCO.

Your battery of choice

Our system supports a wide range of battery brands and technologies. Whether the application requires LFP or NMC batteries or emerging battery technologies, the PixiiBox together with the Pixii Gateway ensures optimal performance, monitoring and managing the health and efficiency of the battery.

QUALITY IN ALL SIZES

Since all our products are built on the same modular architecture with the same building blocks, their functional benefits are largely aligned.

We design our systems to maximize your return on investment - each system combines energy-saving features with income-generating capabilities to create the ideal solution for your needs.

What sets them apart is the system size required for your application and whether you prefer an indoor or outdoor setup.

Designed in Norway and assembled in Europe following strict quality standards, Pixii solutions are built for secure, reliable operation with strong data protection.

Fully GDPR compliant.

PowerShaper XL-P outdoor

100kW up to 225kWh* LFP, ≤0.5C

- For energy and power demanding applications
- Shipped with batteries installed

PowerBase XL-P

900kW up to 2MWh* LFP, ≤0.5C

- High-capacity energy storage with additional power
- Pre-wired on a 20 foot steel container platform
- Easy to relocate
- Fast deployment

Pixii **Home**

20kW up to 20kWh* LFP, ≤1C

- Store your self produced solar energy
- Utilize your existing solar installation
- Safe LFP battery technology
- Operates at extreme temp. down to -40°C*

PowerShaper XL indoor

50kW up to 320kWh* LFP, ≤0.15C

- For energy oriented applications
- Multiple systems can be linked and managed as a single unit
- Fully grid-ready

PowerShaper XL outdoor

60kW up to 225kWh* LFP, ≤0.3C

- For energy demanding applications
- Shipped with batteries installed

PowerBase XL

540kW up to 2MWh* LFP, ≤0.3C

- High-capacity energy storage
- Pre-wired on a 20 foot steel container platform
- Easy to relocate
- Fast deployment

Pixii **Home** hybrid

10kW up to 20kWh / 15kWp* LFP, ≤1C

- All-in-one easy installation
- Built-in solar inverter
- Control with the Pixii Home App
- Operates at extreme temp. down to -40°C*

PowerShaper indoor

50kW up to 50kWh* LFP, ≤1C

- Small m² footprint
- Scalable and flexible
- Fan cooled

PowerShaper outdoor

50kW up to 50kWh* LFP, ≤1C

- 50kW up to 50kWh LFP
- 40kW up to 100kWh NMC
- Fan cooled or aircon

PowerBase

600kW up to 600kWh* LFP, ≤1C

- 600kW up to 600kWh LFP
- 480kW up to 1,2MWh NMC
- Pre-wired on a 20 foot steel container platform
- Easy to relocate

**The stated power and energy capacities are baseline, or nominal, values. Actual performance can vary and may be constrained by several factors, including the state of charge (SoC), state of health (SoH) of the system, as well as thermal conditions. Battery startup below 0°C may require internal heating and AC power, please refer to the "Temperature Table" in the Pixii Home guides.*

VALUE STACKING

ONE SOLUTION, TWICE THE IMPACT

Value stacking is the art of combining multiple services in a Battery Energy Storage System to unlock its full potential.

While it is commonly believed that BESS is primarily for reducing energy costs, the true potential is unlocked with additional revenue from active participation in the electricity market to support the balance of your local or regional grid .

By combining cost-saving services – like peak shaving and PV self-consumption – with revenue-generating opportunities, such as selling battery capacity in electricity markets, you can significantly reduce your electricity bill and tap into new revenue streams.

Why BESS owners get paid

Electricity system operators need to balance the system and reserve back-up capacity to ensure grid stability during peak demand or unforeseen disruptions. Batteries provide a fast and flexible reserve, which helps the grid balance supply and demand fluctuations when renewable sources under-perform or demand spikes.

This "readiness" allows grid operators to avoid costly power outages, avoid curtailment of renewable energy and infra-structure expansion, making BESS a valuable asset they are willing to compensate for.

From savings to earnings

Investing in a BESS is more than just about storing energy – it is about unlocking the full potential of your investment. Value stacking ensures you get the best possible return by combining cost-saving measures with revenue-generating opportunities.

By combining features like peak shaving, arbitrage, PV self-consumption with trading in the electricity markets, your BESS doesn't just lower your electricity bills – it actively works to generate income, turning your energy storage into a profitable asset.

What sets dynamic value stacking apart is its ability to adapt to market conditions and local energy needs, ensuring your system continuously delivers returns, even as the energy landscape evolves.

Whether you're selling excess energy in the market or supporting grid stability, your BESS is always working to maximize your profits. This dynamic approach means that your system isn't just saving you money – it is also helping you earn more, offering a level of financial sustainability and long-term ROI.

At Pixii, we have gained extensive experience implementing value stacking strategies through real-world installations. With numerous systems successfully up and running, we have fine-tuned our approach to maximize the value of every BESS. By combining our deep understanding of energy markets and grid demands with collaboration from trusted EMS partners, we customize each system to ensure the highest return on investment for our customers.

Seamless integration and future-proof flexibility

From the start, our BESS has been engi-neered to deliver the perfect value stack. It's not just about hardware – it's about a complete system that connects easily with energy sources like solar panels and the grid, managing energy inputs and outputs efficiently. The software at the heart of the system allows for real-time adjustments, making the system highly adaptable.

With our modular design, the BESS can easily scale up to meet growing energy demands, ensuring that it continues to deliver maximum savings and revenue for years to come.

Support every step of the way

We make sure you are supported from installation to long-term success. With tight cooperation and seamless integration with partners, we wish to support you every step of the way so you get your system up and running smoothly. After-sales support is readily accessible, and our online tools help you monitor your system in real time, ensuring you get the most out of your BESS.

And to help you navigate the energy market, we connect you with brokers who can include your system in Virtual Power Plants (VPPs), so you can focus on your business while earning additional revenue.

Enabling a greener, decarbonized future

Beyond financial returns, value stack-ing plays a crucial role in supporting the transition to a more sustainable, de-carbonized future. By integrating renewable energy sources, your BESS helps reduce reliance on fossil fuels and stabilizes the grid, even as renewable energy output fluctuates.

This shift is essential in enabling widespread adoption of clean energy technologies and reducing overall carbon emissions. In this way, investing in a BESS with value stacking isn't just an investment in your bottom line – it's an investment in a greener, more resilient future for all.

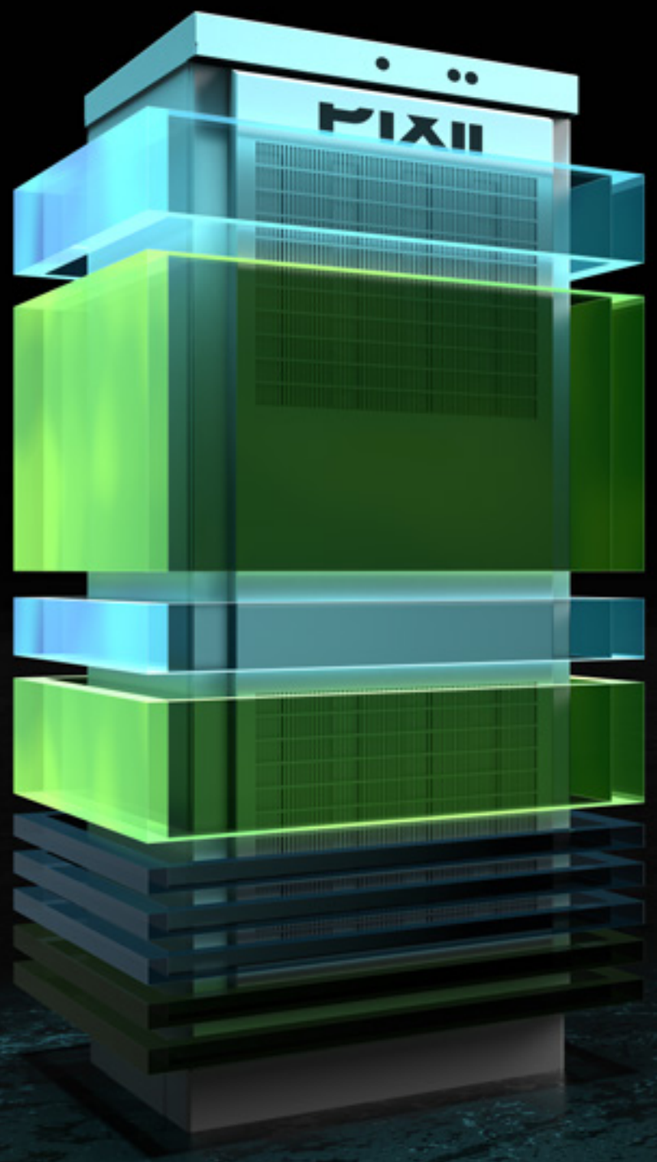
Your BESS becomes a key enabler of the green shift, contributing to the global push toward a sustainable, low-carbon energy landscape.

Our modular approach allows our solutions to be finely tuned to customer needs. To make the most of the potential, we work closely with each customer to understand their requirements and opportunities.

Kenneth Bodahl,
CEO of Pixii

VALUE STACKING

By combining various services, your BESS becomes a powerful tool that not only saves you money but also creates new income opportunities.



Income-generating services

Wholesale electricity trading: Trade stored energy in bulk to balance supply and demand.

Frequency markets: Provide rapid-response energy to maintain grid frequency and stability.

Local flexibility markets: Provide energy storage and release services to manage local grid demands.

Voltage support: Help maintain stable voltage levels across the grid.

Cost-saving services

Peak shaving: Reduce energy use during peak hours and lower your electricity costs.

Arbitrage: Buy and store electrici-ty when prices are low and use it when prices are high.

PV self-consumption: Maximize your use of solar energy by storing excess energy for later.

Backup power: Prevent costly downtime during outages to ensure business continuity.

Power boost: Handle short-term spikes in demand without overloading the grid.

ONE HARDWARE MANY FUNCTIONS

A software-configurable BESS can offer unprecedented flexibility and adapts to your specific needs. This ensures you maximize the return on your investment by consistently getting the most out of your system.

With Pixii BESS, you can capitalize on arbitrage opportunities to save and generate income by buying at low and selling at high cost in the energy market. The system can boost voltage in areas with insufficient grid capacity and employ peak shaving techniques to lower electricity bills and avoid high tariff periods.

Additionally, Pixii BESS enables the generation of income through participation in the flexibility market, offering services like FCAS, FFR and FCR-D.

The Pixii BESS can provide voltage support services which significantly improve quality of electricity supply and mitigating challenges with volatile consumption as well as challenges due to distributed energy production.

It also offers robust back-up solutions with AC Back-up and gen-set integration, ensuring that power is available even during outages.

Pixii BESS plays a vital role in grid support by offering frequency and voltage support, contributing to the stability and resilience of the energy network.

Through these capabilities, Pixii BESS not only offers economic benefits by optimizing energy costs and creating income opportunities but also enhances the reliability and sustainability of power systems.

SAVE COST

- Arbitrage
- PV self-consumption
- Peak shaving

GENERATE INCOME

- Arbitrage
- Electricity markets

BOOST POWER

- Peak shaving
- Voltage support

BACKUP POWER

- Vehicle-to-home
- AC back-up
- Gen-set integration

GRID SUPPORT

- Frequency support
- Voltage support

Join our journey to a more sustainable future

Pixii is committed to a future where sustainable energy is a fundamental pillar of global infrastructure. Our vision is to impact an ecosystem where every watt of power is generated, stored, and utilized in harmony with our planet.

Battery Energy Storage Systems (BESS) are key for a stable resilient power grid, integrating renewable sources to empower communities with energy that's clean, reliable and affordable.

Sustainability for us is all-encompassing, affecting not just how our products have a positive impact on energy infrastructure, but how we source materials, promote reuse and recycling, and make decisions that prioritize environmental and social responsibility.

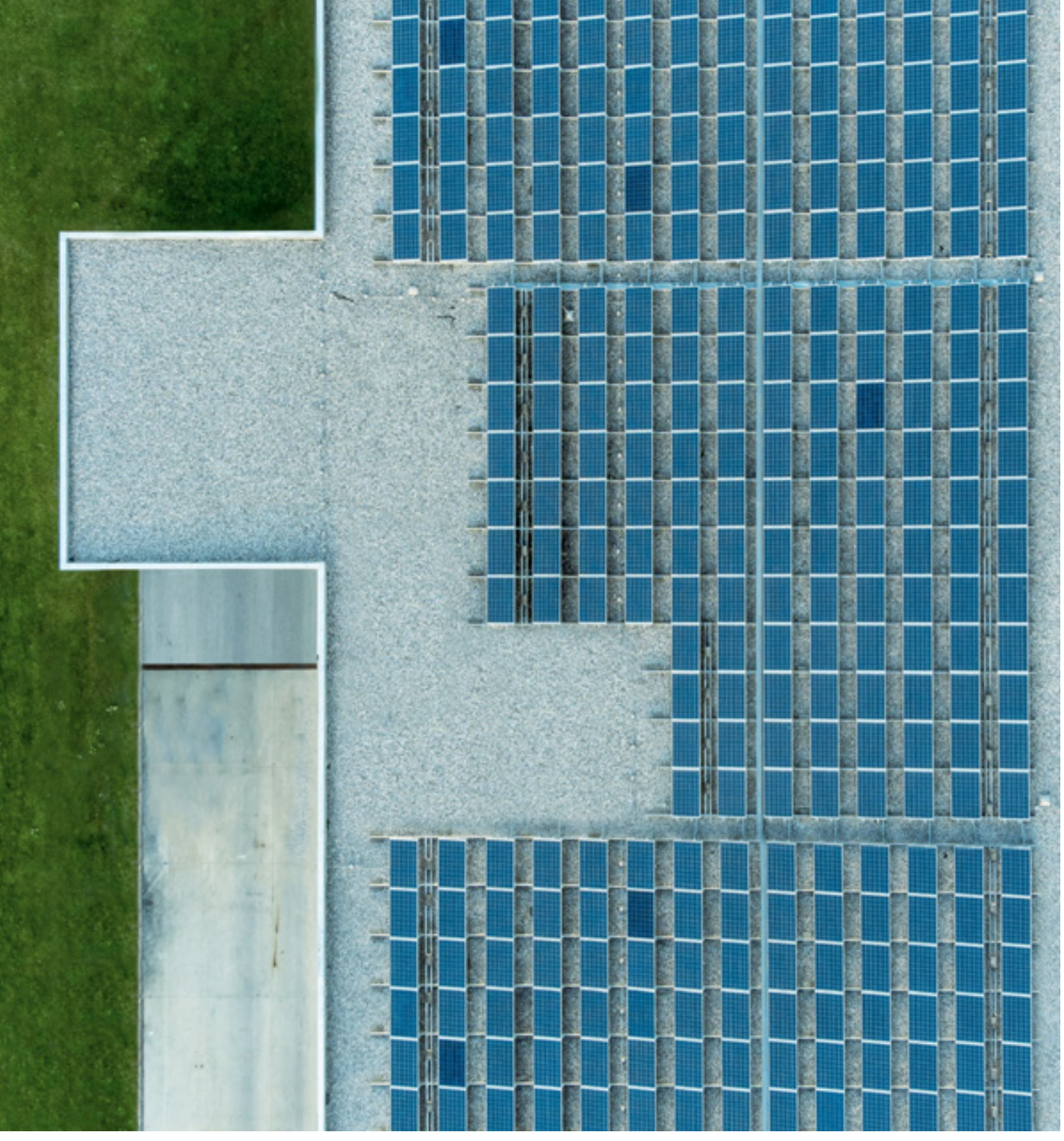
Walk the talk

As a new company, we've had the chance to build sustainability into our core from the beginning. Our progress includes initiatives and commitments within ESG reporting, ISO certifications, and setting clear actionable goals.

We are actively engaged in initiatives that uphold the United Nations Sustainable Development Goals 4, 5, 7, 8, 9, 11, 12, 13, and 17. Our efforts are thoughtfully designed to contribute to; quality education, gender equality, affordable and clean energy, decent work and economic growth, industry innovation and infrastructure, sustainable cities and communities, responsible consumption and production, climate action, and strategic partnerships to deliver on these goals.

We have lists of initiatives and commitments on our web page, some activities executed and some in progress when you read this.

Learn more at www.pixii.com/sustainability



MEETING MARKET NEEDS

Our modular battery energy storage system is ideal for a wide range of markets, allowing you to scale your battery energy storage with growing and changing needs.

Battery energy storage systems (BESS) are necessary to enable the green change by providing a reliable and cost-effective way of storing renewable energy. This helps to reduce emissions from traditional fossil fuel sources, as well as provide more stability for electricity grids that rely heavily on renewables.

Battery energy storage help improve grid efficiency by managing peak demand and allowing utilities to better plan for future growth.

DSO/DNSP

Decongest your grid and improve power quality with our flexible battery energy storage system.

With electrification of society comes high peak loads and uncontrollable distributed energy production, making it challenging to manage distribution grids designed decades ago. Grid operators need a quick-to-deploy and cost-effective solution to support aging assets and improve quality of supply.

Functionalities like voltage support, phase balancing, active and reactive power compensation, giving network operators the tools they need to ensure power quality and grid performance.

Commercial/Industrial

Reduce energy cost and unlock new revenue streams to meet green targets.

New green targets and pressing regulations are forcing companies to electrify their business. Our battery energy storage system allows for optimization of energy consumption and costs whilst unlocking new revenue streams.

Our solution is fully integrated, enabling you to get the most out of your new or existing solar installations. It allows for EV charging, and with smart functionality like time shift and peak shaving you can store energy during off-peak hours to reduce costs and manage energy demand.

Telecom

Activate your “lazy” power systems to generate new revenue streams from flexibility markets.

Bi-directional power conversion enables telecom infrastructure owners to generate significant revenue streams from flexibility markets.

Telecom networks around the world represent a great resource in power and energy which is hardly ever utilized. With modular bi-directional power conversion these assets can be activated, creating additional revenue streams. The telecom loads will have the same resilience, if not better.

EV Charging

Multiply available power for EV fast charging in locations where the grid is weak.

With the rapid adoption of electric vehicles comes an increase in power demand. Upgrading old grid infrastructure is costly and time consuming. BESS enables fast charging in locations with weak grid – to meet the growing demand.

With smart functionality like time shift and peak shaving you can store energy during off-peak hours to reduce costs and minimize demand charge.

Residential

Optimize your energy consumption and reduce cost with our smart BESS.

With rising energy cost, consumers have a growing need to minimize their energy spending and get more out of solar investments. They need a battery energy storage and management solution that is quick to install and easy to use.

With smart functionality, like time shifting and peak shaving, you will reduce your energy bill. You may also generate income by participation in the flexibility markets.

Micro Grid & Off-Grid

Green, cost-effective, and reliable electrification.

Micro grids allow businesses and communities to operate where the grid infrastructure is not sufficient or unstable. Typical applications include fish farming, agriculture, mining and construction sites as well as enabling economic growth in remote villages.

Our BESS is a fully integrated solution. It distributes power from PV panels, AC or DC coupled, and will store your excess energy for later use. It can seamlessly integrate other energy sources, to ensure a reliable supply of electricity.

RESIDENTIAL ENERGY STORAGE

TAKE CONTROL OF YOUR HOME'S ENERGY WITH PIXII HOME

Pixii Home is a smart and reliable battery designed to lower your electricity bills, increase your energy independence, and support a greener future. Built with industrial-grade quality and engineered to get the most out of your solar panels.

Housed in a durable, weatherproof metal casing and backed by a 10-year warranty, it's made to perform in tough Nordic conditions. Whether you want to make the most of your solar power or generate income from trading energy, Pixii Home is your next step toward a sustainable, self-sufficient home.

Optimized for Nordic conditions

Industrial-grade cabinet for the outdoors with a surface that minimizes heat build-up from direct sunlight. Operates at extreme temp. down to -40°C*

European quality and GDPR compliance

Designed in Norway and assembled in Europe following strict quality standards, Pixii Home is built for secure, reliable operation with strong data protection.

Modular technology -Grow as you go!

Future-proof modular and scalable design that allows you to add or swap components like batteries and PixiiBoxes as the technology evolves.

The BESS that pays for itself

Generate income and maximize your return on investment by supporting the grid-get paid for participating in the electricity market.

**Battery startup below 0°C may require internal heating and AC power, please refer to the "Temperature Table" in the Pixii Home guides.*

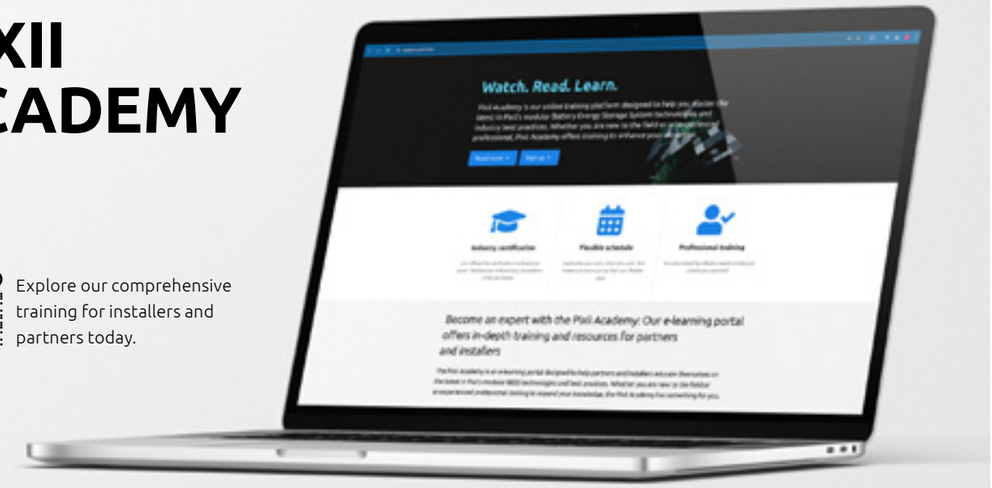
Explore Pixii Home at www.pixiihome.com

OEM's - Offer greater value with Pixii Power Inside

Collaborate with Pixii and excel with the latest in power conversion technology, opening new markets and revenue streams for your brand. Strengthen your position and grow your business.

Our modular and bi-directional power technology with software defined hardware makes it easy to integrate our components into your system.

PIXII ACADEMY



Explore our comprehensive training for installers and partners today.

The Pixii Academy is an online training portal designed to help partners and installers educate themselves on the latest in Pixii's modular BESS technologies and best practices.

Our comprehensive training cover a wide range of topics, including installation, commissioning, maintenance, and troubleshooting for Pixii BESS. Our online courses, webinars and classroom trainings are led by industry experts and provide hands-on learning opportunities to help you build your skills and confidence.

After completing a course, Pixii Academy provides a certification to participants who pass the exam.

In addition to training, the Pixii Academy also provides access to a range of resources, such as technical manuals, user guides, and FAQs. These resources are designed to help you stay up-to-date on the latest information and provide support when you need it.

With the Pixii Academy, you can become an expert in BESS technology and take your career to the next level.

Pixii Academy

SLA - SERVICE LEVEL AGREEMENT

PIXII AT YOUR SERVICE

With our range of services you will get access to our expert team, cloud services, and software enrichment updates, to ensure you stay ahead of the curve and get the most out of your investment.

Signing up for a Service Level Agreement (SLA) with Pixii offers a multitude of benefits, ensuring that you get the most out of your investment through high-quality service, reliability, and dedicated support, giving you peace of mind.

Enhanced system reliability

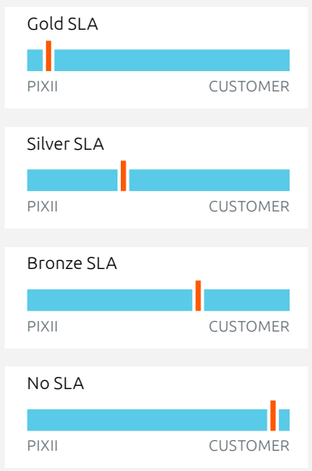
An SLA from Pixii ensures that your systems operate at peak efficiency and are always within warranty requirements.

Regular physical check-ups, timely software updates, and precise battery calibration are all part of our commitment to maintaining the health and performance of your systems. This proactive approach not only extends the life of your equipment but also optimizes its functionality to meet your operational needs. It ensures that the system is run properly, maintained regularly, and that any faults affecting uptime are corrected promptly, freeing you from worrying about compliance with warranty conditions.

Predictable operating costs

With a Pixii SLA, you gain clarity and predictability regarding your system maintenance costs. Our SLA outlines all service charges upfront, eliminating unexpected expenses related to system updates, maintenance, or support. This transparency allows for more effective budgeting, giving you control over your operational expenses.

Responsibilities



Service level overview	No SLA	Bronze	Silver	Gold
Customized solution planning and engineering	-	-	✓	✓
Remote commissioning	$	✓	✓	✓
On-site commissioning*	$	$	$	✓
Annual maintenance*	$	✓	✓	✓
Batteries performance check	-	-	Fortnightly	Fortnightly
System monitoring	-	-	Weekly	Daily
Condition reports	-	-	Annually	6-monthly
Remote access to the system (users)	-	2	5	10
Pixii Cloud monitoring tool (users)	1	2	5	10
Remote technical support (business days)	10	5	3	1
Critical spare parts availability (business days)	-	-	5	2
Swap replacement on products	-	-	✓	✓
Extended warranty	-	-	$	$

$ Price offer on demand.
** Travel and indirect costs are excluded and have to be paid additionally*

All data is subject to change without notice. You will find the latest updates on our website.

Advanced monitoring tools

SLA customers gain access to Pixii's self-monitoring dashboard tools, available in basic and advanced versions. These tools empower you with real-time insights into your system's performance and health, enabling proactive management and decision-making.

Knowing that your systems are under the care of Pixii's experts allows you to focus on your core business activities, giving you the confidence to grow.

Support & rapid response

Pixii's tiered technical support structure ensures that you receive the level of assistance you need when you need it.

Whether you require standard support or more urgent care with a one-day turnaround, our SLA guarantees that your issues are prioritized and resolved swiftly, minimizing downtime and ensuring continuous operation.

Pixii
Partner
program

At Pixii, we value the relationships we have with our partners and are committed to providing the support and resources they need to be successful. Our partner program is designed to help our partners grow their business and increase their expertise in the field of modular battery energy storage systems (BESS).

As a partner, you will have access to a range of benefits, including training and certification programs, marketing and sales support, and technical assistance. You will also have the opportunity to work closely with our team of experts to stay up-to-date on the latest BESS technologies and trends.

We offer several different levels of partnership, depending on your needs and goals. Whether you are a small business looking to enter the BESS market or an established company looking to expand your offering, we have a program that can help you succeed.

If you are interested in joining our partner program and becoming a part of our growing global network of BESS professionals, we encourage you to reach out to us to learn more. We look forward to working with you and helping you achieve your business goals.

pixii.com/partner-program

SAFE AND SECURE

ENSURING QUALITY, CYBERSECURITY, AND FULL GDPR COMPLIANCE

As a Norwegian company, Pixii takes pride in adhering to the highest standards of quality and security.

Our product development, manufacturing, and maintenance integrate multi-layered security protocols, component traceability, online yield monitoring, rigorous testing, and ongoing post-delivery monitoring, ensuring safety, reliability, and performance in every product.

Continuous improvements in cybersecurity

To safeguard our systems against potential threats, Pixii conducts regular penetration testing, collaborating with international certification bodies to address vulnerabilities.

Post-assessment retesting ensures all weaknesses are resolved. Customers with service agreements benefit from continuous hardware monitoring, with regularly updated security checks to prevent unauthorized access.

Our encryption and access control protocols ensure only authorized personnel can access sensitive data, with detailed logs providing transparency and quick response to suspicious activity.

Based in Norway, Pixii is fully committed to GDPR compliance. We ensure customer data is protected and evaluate all new services to meet European privacy standards.

Proven quality and reliability

With a global install base of more than 250MW, Pixii's solutions are proven in critical infrastructure, providing customers with confidence in their reliability. Our quality assurance starts with clear product specifications, incorporating the latest legal and technical requirements. We verify designs extensively, and production includes testing of all sub-assemblies and modules.

Our use of the WATS platform allows real-time performance monitoring, reducing failure risk.

We also conduct long-term reliability testing to ensure products withstand real-world conditions, especially in critical infrastructure.

Comprehensive integration and long-term support

Our solutions are designed for seamless integration with third-party systems. While we are continuously expanding our testing capabilities, we currently test a variety of hardware and software combinations before deployment. For customers who enable remote system monitoring, we offer an extended warranty of up to five years. With our SLA, customers receive active monitoring through the Pixii cloud platform, ensuring optimal system performance around the clock.

Advanced alert systems notify personnel of potential issues like power surges or temperature fluctuations, minimizing downtime.

Continuous improvement

Pixii is committed to ongoing validation and testing improvements to catch potential issues early. We regularly review system logs to learn from unexpected events, enhancing the safety and reliability of our systems.

Norwegian engineering, global reliability

Norway is recognized for its high standards in engineering and innovation, and Pixii embodies this tradition of excellence. Our Norwegian heritage ensures that our products are built to withstand the most demanding conditions, with a relentless focus on safety, security, and quality. This legacy, combined with our cutting-edge technology and proven install base, makes Pixii a trusted partner for companies around the world.

A secure and reliable future

In an era where cyber threats and system reliability are critical concerns, Pixii is leading the charge by building safety, security, and quality into the core of our products. Our advanced testing platforms, strong cybersecurity protocols, and relentless focus on product improvement ensure that we deliver secure, high-performance solutions that meet the needs of today's rapidly evolving energy landscape.

Secure. Reliable.
Built for the future!

Recent projects:

DSO/DNSP

Lede DSO sows seeds of solar success with Pixii.

In the remote Norwegian countryside, one farmer's solar PV system was thriving, but its excess production during sunny months overwhelmed the local grid, causing over-voltage. Lede had to either upgrade infrastructure, or manually adjust transformers daily - neither option was ideal.

The solution

Lede teamed up with Pixii, installing a PowerShaper that efficiently managed over-voltage while minimizing the disruptions typically associated with grid management.

The benefits

Pixii's system automatically balances energy levels, reducing manual intervention and improving grid reliability through voltage support. It is also fully prepared to participate in the Nordic Fast Frequency Reserves (FFR) and Frequency Containment Reserves (FCR) markets, paving the way for potential future revenue streams. As more BESS are deployed, Lede is cultivating a virtual power plant, maximizing ROI.

The results

This successful pilot has inspired other DSOs to adopt similar systems, with a major DSO on Norway's west coast already rolling out multiple Pixii solutions. Lede is proving that sustainable energy can also be profitable, one solar panel at a time.

Check out the video from the project

COMMERCIAL AND INDUSTRIAL

Meny Revetal's sustainable energy journey.

Meny, a leading grocery chain in Norway, aims to reduce its climate impact by 50% by 2030. At its Revetal store, a 300kWp solar PV system was installed, but managing solar energy's unpredictability required innovative solutions. Partnering with TGN Energy and Pixii, Meny integrated the PowerShaper Battery Energy Storage System (BESS).

> *"The flexibility contribution from Statnett will likely be around 600,000 to 700,000 NOK per year per installed MW, which gives a payback period of about ten years now."*
>
> **Mattias Schill**
> Head of Energy &
> Sustainability Services, Å Entelios

This system smooths energy consumption, reduces grid pressure, and engages in electricity trading with Å Entelios, generating revenue while supporting the grid. With AI-based optimization, Meny balances sustainability goals, cost savings, and carbon reduction.

This collaboration exemplifies sustainable business practices, showcasing how businesses can reduce emissions and benefit the community.

Check out the video from the project

ELECTRICITY MARKETS

From grid strain to energy gain: ENGIE powers Slovakia's clean energy with Pixii.

The challenge

As Slovakia shifts toward a sustainable energy future, ENGIE required a flexible energy storage solution to stabilize the grid, manage renewable energy fluctuations, and provide Frequency Control Reserve (FCR).

The system needed to seamlessly integrate with existing infrastructure and expand as future energy needs evolved.

The solution

ENGIE deployed a 1.25MW Pixii Battery Energy Storage System (BESS) at the Veľká Ida Industrial Park. Using Pixii's modular PowerShaper technology, the BESS connects to a 110kV substation, delivering real-time frequency regulation for SEPS, Slovakia's Transmission System Operator.

It can adjust output within 30 seconds, critical for maintaining grid stability.

The benefits

Pixii's technology ensures rapid grid response and seamless capacity expansion, aligning with increasing renewable integration. The BESS smooths out supply-demand imbalances, reducing reliance on fossil fuels during peak periods.

Value stacking capabilities allow ENGIE to enter energy markets, maximizing returns through demand response and energy arbitrage.

The scalable design ensures long-term adaptability and energy flexibility.

The results

Since its launch in January 2024, the Pixii BESS has effectively stabilized the grid and supported renewable integration.

With future expansions already planned, ENGIE's partnership with Pixii positions them at the forefront of Slovakia's energy transformation, driving forward sustainable energy solutions.

ELECTRICITY MARKETS

Leading the charge: Greenbat and Pixii revolutionize energy storage in slovakia.

The challenge

Slovakia's aging grid infrastructure struggles to meet the demands of increasing electric vehicle use and renewable energy integration. Managing peak consumption and load imbalances posed significant challenges, compounded by a regulatory framework that lacked pathways for certifying advanced battery storage solutions.

The solution

Greenbat partnered with Pixii and MTS spol. s r.o. to install and certify Slovakia's first battery energy storage system (BESS) for primary frequency regulation. Executed in three phases, the project deployed Pixii's PowerShaper cabinets, reaching a total output of 5.15MW. The BESS features advanced Ipesoft software for seamless grid integration and real-time market optimization.

The benefits

Pixii's rapid-response technology ensures primary frequency regulation within three seconds, stabilizing the grid and improving resilience against renewable energy fluctuations.

The decentralized, modular design enhances reliability, simplifies maintenance, and allows for scalable growth. Ipesoft's predictive software enables optimized energy trading, boosting both economic and operational efficiency for Greenbat.

The results

The collaboration has successfully delivered 4MW of Frequency Control Reserve (FCR) and established a robust energy storage model.

With plans to expand across Slovakia, Greenbat's initiative sets a benchmark for renewable energy integration and positions them as leaders in advancing the region's energy landscape.

DSO/DNSP

Making waves: Bondi Beach powers ahead with Pixii's community battery.

The challenge

Bondi Beach's sunny climate makes it ideal for solar energy generation. However, the community often produces more solar power than it can use, resulting in energy wastage. Additionally, with the rise in electric vehicle ownership, Bondi needed a sustainable EV charging solution powered by renewable energy.

The solution

Pixii, in collaboration with Ausgrid and PlusES, installed a 160kW / 412kWh Battery Energy Storage System (BESS) at Bondi Beach. The modular PowerShaper technology captures and stores excess solar energy from local households, making it available when needed. The system also powers a council-operated EV charging station using renewable energy.

The benefits

The BESS reduces energy waste by storing surplus solar power and releasing it during peak times, lowering energy costs for residents. It supports Bondi's sustainability goals by providing solar-powered EV charging, cutting emissions, and reducing dependence on traditional energy sources.

Pixii's scalable design ensures the system can expand to meet future increases in solar and EV usage.

The results

Since its launch in January 2024, the Pixii BESS has effectively stabilized the grid and supported renewable integration.

The community battery has successfully maximized solar energy utilization and provided a reliable renewable charging infrastructure. Bondi Beach is now a beacon for sustainable energy, inspiring similar initiatives across Australia. As part of a broader effort to roll out 400 community batteries nationwide, Bondi's success demonstrates the effective use of solar energy storage.

DSO/DNSP

First pole-top mounted battery energy storage solution in Australia.

Only the sky is the limit!

This is part of a $10 million Queensland-first initiative aimed to help deliver "the renewable energy revolution".

As part of this project, neighborhood batteries are being rolled out across Ipswich as part of the Palaszczuk Government's Queensland Energy and Jobs Plan.

> *"The neighborhood batteries offers numerous benefits to communities including increased energy reliability, reduced energy costs, and a cleaner energy supply. These batteries will store cheap excess energy generated by the equivalent of nearly 600 rooftop solar systems during the day. Critically, they will deploy that cheap electricity during peak evening periods, lowering household energy bills."*
>
> **Mick de Brenni**
> Energy, Renewable and Hydrogen Minister

The PoleTop PowerShaper from Pixii, is an IP55 complete modular energy storage system.

It is fully integrated and ready to be connected to the grid for applications as grid support, solar self-consumption, demand charge reduction, peak shaving, arbitrage, FCAS and FFR services.

EV CHARGING

Pixii and Elywhere's groundbreaking partnership.

As the world shifts to sustainable energy, EVs are growing in popularity, but adoption is slowed by limited charging infrastructure and insufficient grid capacity.

Upgrading the grid for fast charging is costly and time-consuming. Circle K, a multinational service station and charge point leader, launched a pilot project with Elywhere in Ski, Norway, to showcase reliable and convenient EV charging, even in areas with poor grid infrastructure.

The solution

Circle K's Ski pilot project was solved with 6 Pixii PowerShaper cabinets, offering 300kW output from a 40kW grid input.

The cabinets were strategically pre-installed on a 400kW EV charging platform, enabling the simultaneous fast-charging of up to 4 vehicles. All managed seamlessly by the Elywhere site controller.

The benefits

EV charging drives traffic and sales, encouraging purchases while drivers wait. Smart features like energy arbitrage and peak shaving reduce costs and demand charges by storing energy during off-peak hours.

With no single point of failure, it's a robust and low-maintenance system. The Pixii system also enables participation in energy markets, creating additional revenue streams.

Demand has risen to 60-70 charging sessions daily, with up to 1MWh sold per day-performance made possible by battery energy storage.

COMMERCIAL AND INDUSTRIAL

Powering tour buses with solar power.

OsloBuss AS are using electric tour buses to align their business with green targets. At an old factory facility, just outside of Oslo, solar panels are covering the facade of the building. The solar energy is stored in a Pixii battery energy storage system (BESS), ready to charge the fleet of electric buses.

We believe this electric concept for transportation is leading the way for a greener and more sustainable way of people transport.

DSO/DNSP

Supporting the national grid in remote locations together with Elvia.

As Norway becomes more electrified, 1950s grid infra structure struggles to get a grip of high consumption and load imbalances.

Remote, mountainous terrain and a cold climate compound the difficulties of building and maintaining power lines. And a scattered population makes the business case of larger grid upgrades difficult to justify.

On top of this, high penetration of electrical vehicles, high peak consumption, and load imbalance create low voltage challenges in the grid. In low consumption periods, solar energy fed to the grid can create voltage peaks way above strict regulations. Ironing out those peaks is a mainstay of DSO Elvia's mission, because it enables prosumers to participate in the Green revolution – making the grid more inclusive for renewable energy.

Elvia needed a flexible solution that's quick to install, with advanced function-ality for phase balancing, and active or reactive power compensation. The Pixii PowerShaper allowed Elvia to effectively upgrade the grid, fast-forwarding a process that might have taken 10 years to just a few hours.

The solution

Elvia self-installed one Pixii PowerShaper cabinet (30kW, 65kWh system) delivered with NMC batteries.

The project was completed smoothly in just half a day, with one cabinet serving around 20 houses in this particular Sjusjøen pilot.

COMMERCIAL AND INDUSTRIAL

Pixii delivers major battery energy storage system in Germany.

Power & Air Solutions (PASM), a Deutsche Telekom subsidiary, has completed its first battery energy storage system (BESS), supplied by Pixii. The storage system is installed at one of Deutsche Telekom's main offices in Munich.

> *"We are thrilled to be able to assist Power & Air Solutions and Deutsche Telekom in the ambitious plans. This is a major recognition of Pixii's technology. We are seeing strong interest from customers in our modular and flexible technology, which lowers the entry barriers for customers seeing the need for energy storage to cope with increasingly volatile energy markets"*
>
> **Volker Rossmann**
> CSO of Pixii

The installation has 1MW of conversion capacity and 6MWh of storage capacity. The solution is based on the PowerShaper product family. It will be followed shortly by a second installation in Münster.

In total, PASM plans to install battery energy storage systems with a total capacity of more than 300MWh. This capacity will be used for peak shaving, arbitrage and to maximize the use of renewable energy, as well as to participate in energy markets to contribute to the stability of the German electricity network.

DSO/DNSP

Powering progress in rural areas by boosting energy capacity.

With the electrification of society, the power capacity is being stretched to its limits by business operations during the day, holding regions back from achieving their full economic potential.

A monster challenge

In the remote forest municipality of Lierne, Norway, there's a growing threat to the region's prosperity. The power demands of the Jule Industrial area often exceed the grid capacity during working hours, leading to shortages. Frustratingly, when night falls and businesses switch off, there is an abundance of capacity in the grid. This imbalance has been a thorn in the side of progress, deterring power-intensive commercial activities. With traditional grid expansion being prohibitively expensive and time-consuming, running into hundreds of millions of Norwegian kroner and often taking several years, Tensio, Lierne's energy provider, required a faster and smarter solution.

Recognizing the need for innovation, Peak Shaper, a subsidiary of Eidsiva Energi, Norway's largest power grid company, initiated a pilot project to solve Tensio's power capacity problem using Pixii's groundbreaking battery energy storage technology.

The solution

Eidsiva's subsidiary Peak Shaper rents out Pixii's grid batteries to quickly enhance capacity. The Pixii PowerBase solution, a robust 1MW storage system, pre-wired and pre-configured on an easy to transport steel frame with the footprint of a standard ISO 20-foot container, was the perfect fit for Tensio's demand in Lierne.

Pixii power!

The Peak Shaper pilot project in Lierne is the first of its kind, investigating the effect of batteries on voltage regulation in the grid together with the network operator Tensio. The goal is to boost the voltage in a weak network, enabling industrial custom-ers in the area to increase their electricity consumption without Tensio having to undertake other network- strengthening measures.

The Pixii PowerBase comes pre-wired and pre-configured, reducing installation cost and delivery time. Instead of pouring millions into traditional grid expansion, Pixii's approach allows for significant savings, paving the way for future-focused investments.

Pixii's 48-volt internal architecture offers easy maintenance, while its modularity guarantees reliable operation with no single point of failure. In the dynamic world of power, where needs are constantly evolving, the PowerBase can be quickly relocated to boost power in other areas with insufficient grids.

The benefits

This successful collaboration between Peak Shaper, Tensio and Pixii marks a significant advancement in the energy transition journey.

> *"Batteries are the future of our grid. Even as we expand rapidly, they offer a fast-track solution to challenges like Lierne's throughout Trøndelag."*
>
> **Øistein Andresen**
> CEO Eidsiva

Pixii's smart battery energy storage solution in Lierne is more than just an energy remedy; Businesses in the Jule Industrial area now operate unhampered, and the area stands at the cusp of new job opportunities and industrial growth.

The Lierne pilot project has exceeded expectations, reducing the cost of network loss for Tensio in the area by 22% and winning the Smartgrid Center's Innovation Award 2023!

COMMERCIAL AND INDUSTRIAL

Green grocers – Coop Norge's sustainability success with Pixii's BESS

Coop Norge, Norway's second largest grocery chain, were ranked by Norwegian consumers as industry winners in the Sustainable Brand Index 2023, Europe's largest market study in sustainability. While awards and recognition are great, Coop were determined to keep pushing forward to exceed their consumers high expec-tations and achieve their own ambitious sustainability goals.

The solution

Coop installed two Pixii PowerShaper systems: four cabinets outside and three inside. This setup positions energy close to high-demand areas, enhancing power quality. Separate meters for each system streamline optimization and maximize efficiency.

The benefits

The Pixii PowerShaper offers smart features like peak shaving, helping Coop cut grid tariffs and provide load reduction for grid owners. Fully integrated with Coop's solar panels, it optimizes power use by storing excess energy for peak times, reducing grid reliance. By enhancing power availability, it replaces a 2MW transformer, supporting mobile coolers on food trucks and paving the way for future electric truck charging. Its modular design allows easy scaling, minimizing CAPEX.

The results

The pilot project surpassed expectations, boosting Coop's warehouse power capacity, reducing CO_2 emissions and energy costs, while enhancing Coop's green image beyond customer expectations.

RESIDENTIAL

Pixii Home charges into the Swedish market with cost-efficient BESS.

As Pixii moves into the Swedish consumer market, we have strategically partnered with Greenely, a leading player in home energy management, to offer innovative and cost-effective energy solutions for Swedish households.

> *"The collaboration between Greenely and Pixii responds to the growing need for sustainable energy solutions and represents a crucial step towards a greener future. By providing a platform for efficient energy storage and usage, this cooperation enables households to reduce their dependence on traditional energy sources while lowering their energy costs."*
>
> **Tanmoy Bari**
> CEO and co-founder of Greenely

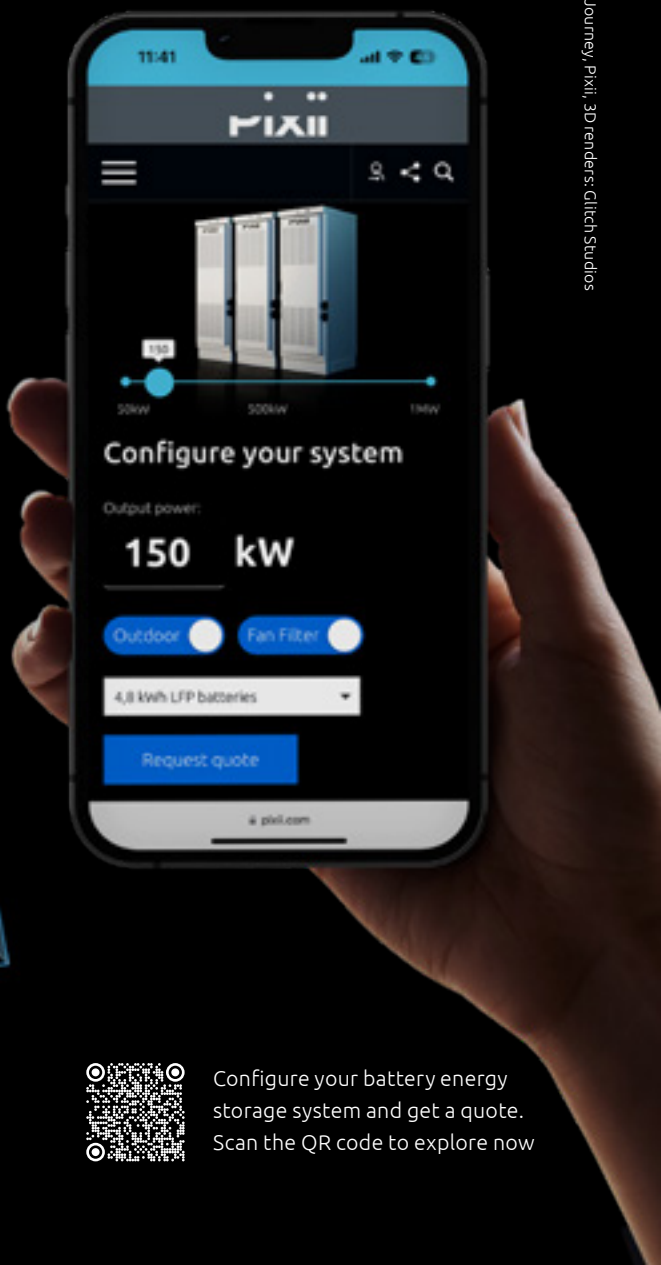
By integrating with Greenely's services, Pixii Home enhances the capacity of Greenely's Virtual Power Plant, allowing consumers to reduce their energy costs and even generate income by selling excess energy back to the grid, all while supporting the stability of the local energy system. The collaboration between Pixii and Greenely marks a significant milestone, signaling a shift towards more widespread adoption of Pixii's battery energy storage systems. The installation of the first batch of Pixii Home systems to consumers is just the beginning.

The success of this initiative has already created further demand and soon-to-be-announced partnerships.

ONLINE CONFIGURATOR

The Pixii PowerShaper is a scalable energy storage solution that adapts to your changing demands.

You can customize your system by adding more cabinets to match your load requirements.



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