

PSW

POWER & AUTOMATION[★]

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Energy control

As the world faces pressing challenges such as climate change, energy security, and economic competitiveness, investment in energy infrastructure is crucial.



Energy Control

When the laws of physics set limits, software continues to drive innovation forward. We deliver tailor-made solutions to meet your needs.

Energy Management System

Our Energy Management System can integrate individual entities or large complex systems, all depending on the energy infrastructure. Essentially, EMS provides safe and reliable operation in all modes while balancing energy produced, stored, and consumed.

With its data insight, the EMS fulfills the operational requirements and primary objectives of the designed energy system, enabling limited or prioritized power transfer to EV-charging units, peak-shaving, reducing demand from a weak grid or to keep energy tariffs low. For systems with energy production and storage, the EMS, with the help of its market insight, can act accordingly to leverage the best economic beneficial outcome between store, trade, or use.

When price arbitration and/or balancing services are a secondary endeavour and preserving battery life for its primary objectives is key, the EMS monitors and regulates the secondary activities (through communication with the AMS), ensuring that the use of batteries does not exceed given thresholds that will compromise their life, thus securing the batteries for its primary purposes and maximizing its lifetime for an optimal return on the investment.



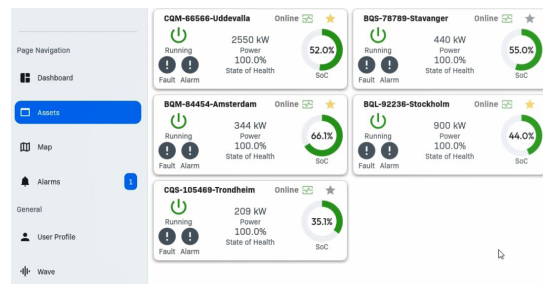
Asset Hub

Asset Hub is an asset dashboard customised for your asset collection. This user interface displays key figures for asset status and health, and for some applications, market data and revenue are visualized to give a total overview.

Layout and data-fields will vary and depend on the type of assets and application. This is adapted to best suit the user-case.

The scheduling table enables users to control the time and day of market participation. Alternatively, this can be handled from the AMS automatically.

The Asset Hub is web-based, so no software installation is required. If desired, an Asset Hub API is available for customers who wish to integrate this into their own systems.



Smart Grid Technology

One of the key strategies for integrating renewables is the development of smart grid technologies.

Smart grids utilize advanced sensors, communication networks, and control systems to efficiently manage electricity generation, distribution, and consumption in real-time.

By incorporating renewable energy forecasting algorithms, grid operators can anticipate fluctuations in generation and adjust power flows accordingly, thereby minimizing disruptions and optimizing resource utilization.

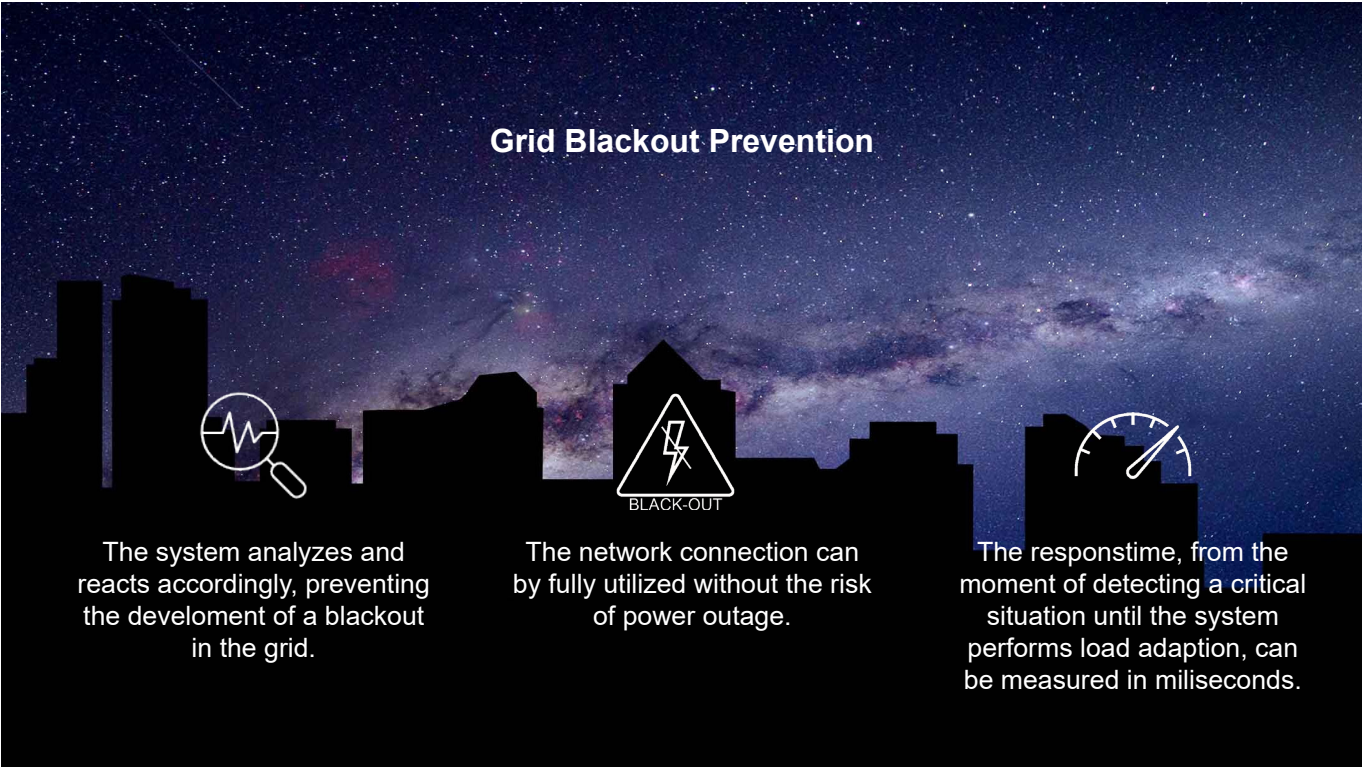


Asset Management System

AMS collects and transmits data to all connected assets and orchestrates all single entities of assets to convene their capabilities for use in the energy and/or balancing markets. This therefore makes it possible for smaller assets, which are unable to participate alone, to take part in delivering balancing services, and thus smaller assets can also receive income from their flexibility.

As AMS collects all relevant data, it also shares asset and market specific data with Asset Hub, enabling full transparency with our clients. AMS functions as Market Participation as a Service and enables asset owners to take advantage of these growing markets without having to invest time and capital in their own technologically developed systems.

Grid Blackout Prevention



The system analyzes and reacts accordingly, preventing the development of a blackout in the grid.

The network connection can be fully utilized without the risk of power outage.

The response time, from the moment of detecting a critical situation until the system performs load adaptation, can be measured in milliseconds.

Contact us:

Jens Hjortset
Director Business Development
PSW Power & Automation AS
Norway

jehjo@psw.no
+47 993 22 218

Anders Hedin
Managing Director
PSW Power & Automation AB
Sweden

anders.hedin@psw.no
+46 (0) 702 078 688

We are powered by the future

PSW

POWER & AUTOMATION★

PSW Power & Automation
Bleivassvegen 7
NO-5363 Ågotnes

+47 56 31 34 00
firmapost@psw.no

Org.nr: 982574145

