

# BAXENERGY

A Yokogawa Company

## Energy Studio Pro® for Hydrogen Production Management

Empowering Intelligent Management  
of Green Hydrogen Production



Bulletin 53T01D03-01EN

Are you struggling with

- Managing complex, real-time data from diverse sources?
- Reducing downtime and proactively preventing failures of your hydrogen assets?

# Gain control with the first solution for green hydrogen management!

Energy Studio Pro® equips hydrogen power plants with state-of-the-art software solutions to monitor, control, and optimize production. Our technology supports real-time data collection, advanced analytics, and proactive system alerts, ensuring operational excellence across hydrogen facilities.

## +5% Operational Efficiency

- Avoid costly downtime by detecting issues like leaks or equipment degradation.
- Recapture production losses with predictive alarms that alert you to potential issues before they escalate.
- Centralize data across multiple hydrogen assets for enhanced oversight.

## Scalable and Flexible platform

- Manage a single plant or a full portfolio with ESP's adaptable, scalable infrastructure.
- Expand plants and operations easily, adapting the platform to your production requirements.
- Access historical and real-time data anytime, anywhere, with ESP's mobile-ready dashboards.

## Data-Driven Insights

- Real-time monitoring from production to distribution.
- Leverage historical data and trend analysis to optimize hydrogen production and minimize resource waste.
- Generate detailed reports on H<sub>2</sub> purity and site performance.

## Environmental Responsibility and Safety

- Stay compliant with international safety standards (ISO 19880, IEC 61508, ATEX).
- Support low-carbon hydrogen production by optimizing resource use and minimizing emissions.
- Enhance site safety with advanced monitoring systems and ensure real-time response to potential risks.

# Unlock the Full Potential of Your Hydrogen Plant



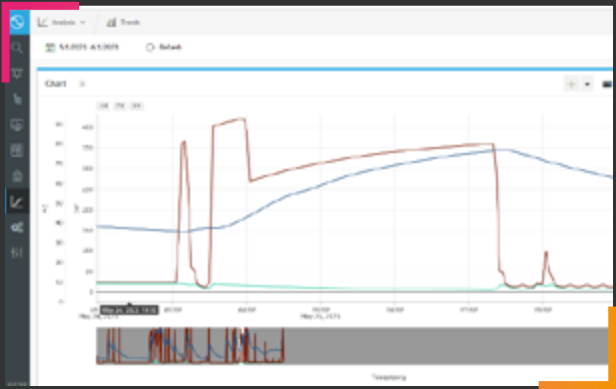
## Centralized Real-Time Monitoring

- Gain complete visibility into hydrogen plant operations. Unify data from every plant subsystem into one dashboard, accessible from anywhere.
- Keep critical KPIs always under control. View production status, energy consumption, water usage, and storage levels at a glance.



## Predictive and Real-Time Alarms

- Minimize unplanned downtime with predictive alarms configured for each plant component, including hydrogen compressors, dispensers, and electrolyzers.
- Customize alarm thresholds for critical parameters such as temperature, pressure, and storage tank levels. Ensure prompt intervention, reducing costly delays and equipment strain.



## Advanced Data Analytics and KPIs Reporting

- Harness the power of AI and advanced analytics algorithms to accurately predict and measure production losses, quantifying their financial impact.
- Assess technical availability, production efficiency, and operational costs in real-time, enhancing decision-making and financial planning.



## Remote Control Capabilities

- Remotely manage vital plant functions—from electrolyzer control to compressor adjustments and dispenser activation—through ESP's intuitive command interface.
- Save time and costs by reducing the need for on-site personnel. Maintain hydrogen production efficient and secure from any location.

# About BaxEnergy a Yokogawa Company



We are a group of passionate thinkers with the common goal of contributing to building a greener world by using our creativity, passion for innovation and rock-solid software.

In 2024, BaxEnergy was acquired by Yokogawa Electric Corporation. Founded in Tokyo in 1915, Yokogawa continues to work toward a sustainable society through its 17,000+ employees in a global network of 127 offices spanning 59 countries.

Our company offers leading multi-vendor cross-functional IoT operating software technology for visualizing, analyzing and optimizing operations in wind, hydro, solar, geothermal, and combined cycle power plants.

The technology now also supports battery storage technology and can be used to monitor and control the production of green hydrogen and green ammonia.

**+10**

Years of  
experience

**+40**

Countries using  
our solutions

**+130** GW

of renewable  
energy monitored

**+2000**

Power plants  
connected worldwide



Contact us on  
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or scan the QR code

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Printed in Japan, 501(KP) [Ed : 01/b]

