

Lysaker, Norway, and Tokyo, Japan – November 1, 2023

TECO 2030 ASA  
Yokogawa Electric Corporation

## **TECO 2030 and Yokogawa Sign Partnership and Investment Agreement for the Utilization of Hydrogen Fuel Cells in Industrial Applications**

TECO 2030 ASA ("TECO 2030", OSE: TECO, OTCQX: TECFF, ISIN: NO0010887516) and Yokogawa Electric Corporation ("Yokogawa Electric", TOKYO: 6841) announce that they have signed a strategic partnership and investment agreement regarding the development of technology for utilizing hydrogen fuel cells in industrial applications. Under this agreement, Yokogawa Electric has invested in TECO 2030 by way of acquiring treasury shares, and the two companies will collaborate on optimizing hydrogen fuel cell technology and exploring business opportunities for distributed power sources in the maritime transportation and other industrial sectors.



Rendering of TECO 2030's 400kW FCM 400 fuel cell module

Hydrogen fuel cells use an electrochemical process that combines hydrogen and oxygen to produce electrical energy and water, and are utilized as power sources in fuel cell vehicles (FCV) and stationary power supply devices. Green hydrogen and ammonia are considered promising energy carriers for the storage and transportation of renewable energy that has been produced as electricity. Fuel cells powered by green hydrogen, or hydrogen produced through green ammonia-to-hydrogen cracking technology, are more energy efficient than conventional combustion engines and don't generate nitrogen oxide (NOx), so can be used as zero-emission energy sources in a range of applications. Although adoption has been limited up to now, technology maturity and a dramatic increase in demand for hydrogen-powered marine vessels are driving expansion of the fuel cell market, and the resulting reduction in manufacturing costs is expected to in turn accelerate use in the automotive and industrial sectors as well.

TECO 2030 develops and manufactures hydrogen fuel cells, and has opened in Narvik, Norway, a gigafactory

for the production of hydrogen proton exchange membrane (PEM) fuel cells and energy modules, which consist of multiple cells and auxiliary operating equipment. Production of hydrogen fuel cells is already underway, and module production is expected to start within the next few months. The production capacity will be built up over time, targeting an output capacity of 400 MW in 2025 and 1.6 GW in 2030. TECO 2030's hydrogen fuel cells employ unique technologies developed together with technology partner AVL, a forerunner in this field, enabling industry-leading energy density and performance.



TECO 2030 hydrogen fuel cell gigafactory in Narvik, Norway

Yokogawa Electric brings to this partnership decades of experience in developing core measurement, control, and information technologies for the energy, chemical, and other process industries. Yokogawa Electric and TECO 2030 see opportunities for applying this knowhow to develop technology for optimizing the operation of fuel cells, and will also explore their use as distributed energy resources in industries that have high decarbonization needs.

Tore Enger, Group CEO of TECO 2030, commented, “I am very excited to have Yokogawa on board as an investor and strategic partner for the ongoing development of TECO 2030's complete fuel cell system. I am looking forward to working together toward the common goal of a zero-emission future.”

Tsuyoshi Abe, a Yokogawa Electric senior vice president and head of the Marketing Headquarters, said, “As we mention in our whitepaper *Reweave the World\**, energy conversion systems are going to play an important role in the transition from the fossil fuel era to a renewable energy era. Yokogawa firmly believes that fuel cells are one of the pathways to net-zero emissions in the maritime and industrial sectors, and we are confirming this by embarking on a journey with TECO 2030 as a strategic partner for a sustainable future.”

\* Yokogawa Electric Corporation, [\*Reweave the World—Energy Systems Convergence leads to global resilience and sustainability in energy, food, and water\*](#), 2023

### **About TECO 2030**

TECO 2030 is a Norwegian clean tech company developing zero-emission technology for maritime and other industries. We are developing PEM hydrogen fuel cell stacks and PEM hydrogen fuel cell modules that enable

ships and other industrial applications to become emissions-free. TECO 2030 is a spinoff from TECO Maritime Group, which has provided technology and services to the global shipping industry since 1994. The company is listed on Euronext Growth on Oslo Stock Exchange under the ticker TECO and in New York, OTCQX under the ticker TECFF. For more information, visit [www.teco2030.no](http://www.teco2030.no).

### **About Yokogawa**

Yokogawa provides advanced solutions in the areas of measurement, control, and information to customers across a broad range of industries, including energy, chemicals, materials, pharmaceuticals, and food.

Yokogawa addresses customer issues regarding the optimization of production, assets, and the supply chain with the effective application of digital technologies, enabling the transition to autonomous operations.

Founded in Tokyo in 1915, Yokogawa continues to work toward a sustainable society through its 17,000+ employees in a global network of 129 companies spanning 60 countries.

For more information, visit [www.yokogawa.com](http://www.yokogawa.com).

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