

Hitachi Energy and Petrofac secure landmark offshore wind agreement worth approximately 13 billion euros

- *Largest framework agreement in Hitachi Energy company history, enabling long-term capacity expansion to accelerate the energy transition.*
- *Complementary technologies and expertise support TenneT's offshore wind capacity expansion in the German and Dutch sectors of the North Sea.*



2GW offshore platform. Photo courtesy of TenneT

Zurich, March 30, 2023 – Hitachi Energy, a global technology leader that is advancing a sustainable energy future for all, and Petrofac, a leading international service provider to the energy industry, have been selected by TenneT, the Dutch-German transmission system operator, to supply multiple offshore and onshore HVDC converter stations and associated infrastructure to accelerate the integration of bulk renewables into European power grids.

Hitachi Energy and Petrofac were awarded the multi-year framework agreement as part of TenneT's ambitious offshore wind "2GW Program"¹, based on high-voltage direct current (HVDC) technology pioneered by Hitachi Energy.

The agreement includes an initial commitment to deploy six record-breaking renewable integration systems, five of which will connect offshore wind farms to the Dutch grid and the sixth to the German grid. Each of these connection systems has a capacity of 2 gigawatts (GW) and a voltage level of 525 kilovolts (kV) - a world-first for offshore wind.

This landmark framework agreement is the largest ever for Hitachi Energy. It confirms the opportunity to innovate how state-of-the-art technology can be deployed effectively and how new business models enable the scale needed for the green energy transition. The framework agreement approach allows Hitachi Energy and Petrofac to plan in advance and increase their workforce and manufacturing capacity timely as well as train people to have the skills needed in the industry while also capturing synergies between successive projects to meet the in-service dates.

Hitachi Energy will supply its HVDC Light[®] converter stations, which convert AC to DC power offshore and DC to AC onshore. Petrofac will undertake the engineering, procurement, construction and installation (EPCI) of the offshore platforms and elements of the onshore

converter stations.

The first contract under the framework, for the Ijmuiden Ver Alpha project, was awarded with immediate effect. The second, Nederwiek 1, is expected to be awarded later in the year. The framework also includes projects Doordewind 1, Doordewind 2, Nederwiek 3 and LanWin5, expected to be awarded over a 2024-2026 timeframe.

“This innovative business model will set the course for the integration of a huge amount of offshore wind power and gives visibility of the future. In fact, we are already hiring to expand our global delivery capacity and effectively fulfill these and other orders,” said Niklas Persson, Managing Director at Hitachi Energy’s Grid Integration business. “We’re proud to be part of this journey and, along with our partner Petrofac, we are setting the benchmark for deploying offshore HVDC technology at scale and with speed.”

“Today’s announcement represents an exciting next step in Petrofac and Hitachi Energy’s collaboration. We have already secured key resource and the yard capacity required to expedite the first two projects in TenneT’s ground-breaking program,” said Sami Iskander, Petrofac’s Group Chief Executive. “By combining Petrofac’s industry-leading EPCI expertise and Hitachi Energy’s well proven technology, we look forward to supporting TenneT to connect larger, more effective wind farms to deliver affordable clean energy for millions of European homes.”

“TenneT has the technical know-how, scale, and geographical position to connect wind energy from the North Sea. This is one of the most important infrastructure projects of the century; the green transformation of the energy system is key for the decarbonization of industry,” said Tim Meyerjürgens, COO of TenneT. “Together with our market partners, we are very proud to have achieved another important milestone. Together we secure decisive acceleration of the offshore grid development and set the course for the future European energy landscape.”

“The new long-term approach goes hand in hand with a fundamental change in values towards a strong partnership. This approach enables both sides with more flexibility, technological progress, and planning security,” said Marco Kuijpers, Director Large Projects Offshore of TenneT. This benefits all parties and secures employment, growth, and the strengthening of supply chains. We can already see that our partners invest in extra resources and facilities.”

Hitachi Energy and Petrofac began working together in June 2022, to provide joint grid integration and associated infrastructure solutions to support TenneT’s 2GW Program.²

In the same year, Germany, the Netherlands, Denmark and Belgium agreed to install at least 65 gigawatts of offshore wind energy combined by 2030 announced with the inter-governmental Esbjerg Declaration.³ At 40 gigawatts, almost two-thirds of this capacity is accounted for by TenneT, with 20 gigawatts each in the German and Dutch North Sea sectors.

1 [TenneT’s 2GW Program](#)

2 [Hitachi Energy and Petrofac to collaborate in growing offshore wind market](#)

3 [The Esbjerg Declaration](#)

HVDC website:

<https://www.hitachienergy.com/offering/product-and-system/hvdc>

- End -

About Hitachi Energy Ltd.

Hitachi Energy is a global technology leader that is advancing a sustainable energy future for

all. We serve customers in the utility, industry and infrastructure sectors with innovative solutions and services across the value chain. Together with customers and partners, we pioneer technologies and enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future. We are advancing the world's energy system to become more sustainable, flexible and secure whilst balancing social, environmental and economic value. Hitachi Energy has a proven track record and unparalleled installed base in more than 140 countries. Headquartered in Switzerland, we employ around 40,000 people in 90 countries and generate business volumes of approximately \$10 billion USD.

<https://www.hitachienergy.com>

<https://www.linkedin.com/company/hitachienergy>

<https://twitter.com/HitachiEnergy>

About Hitachi, Ltd.

Hitachi drives Social Innovation Business, creating a sustainable society with data and technology. We will solve customers' and society's challenges with Lumada solutions leveraging IT, OT (Operational Technology) and products, under the business structure of Digital Systems & Services, Green Energy & Mobility, Connective Industries and Automotive Systems. Driven by green, digital, and innovation, we aim for growth through collaboration with our customers. The company's consolidated revenues for fiscal year 2021 (ended March 31, 2022) totaled 10,264.6 billion yen (\$84,136 million USD), with 853 consolidated subsidiaries and approximately 370,000 employees worldwide. For more information on Hitachi, please visit the company's website at <https://www.hitachi.com>.

Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.
