PRESS RELEASE

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First steel cut for the offshore platform DolWin epsilon in Singapore - DolWin5 grid connection reaches important milestone

- **Start of construction for 11th direct current converter platform**
- **Grid connection project with 900 megawatt capacity as a contribution to the energy transition**
- **Completion of DolWin5 planned for 2024**

As part of the DolWin5 project, the "first steel cut" marked the start of the construction of the DolWin epsilon offshore converter platform in Singapore on Tuesday, December 1st. Due to the current situation, this important event took place on a small scale and under strict hygiene regulations at the Keppel Offshore & Marine shipyard: While the project directors of TenneT Michiel Cadenau and Angelique van Soest-Veenmann as well as the Executive Vice President from Aibel, Nils Arne Hatleskog, followed the event virtually, the project manager for the converter platform Maurice Blenkers – in the presence of the Managing Director of Keppel Offshore & Marine (Newbuilds) Tan Leong Peng – pushed the button for the first steel cut.

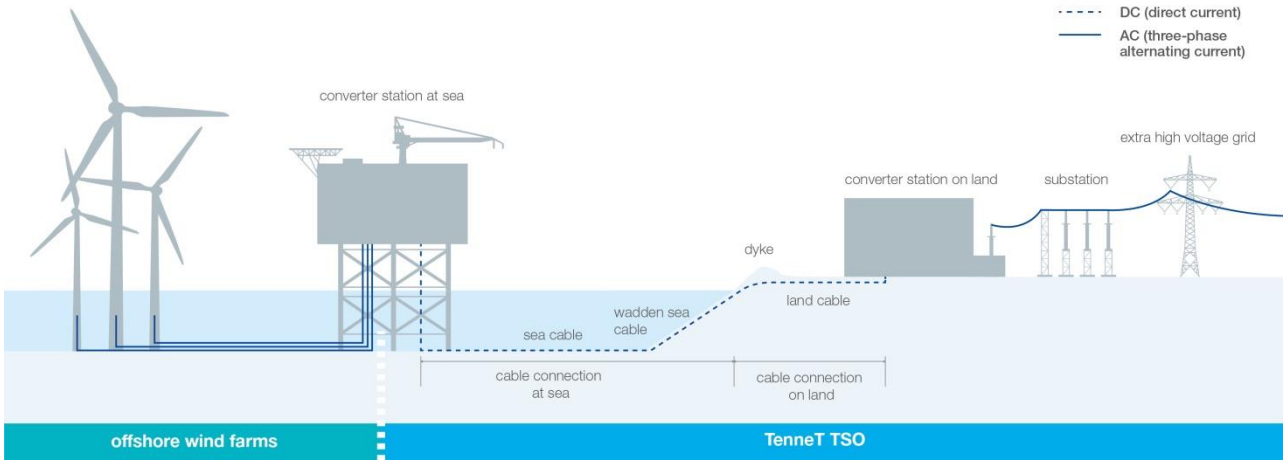
The 900 megawatt DolWin5 high-voltage direct current (HVDC) transmission system will connect the Borkum Riffgrund 3 offshore wind farm off the coast of Lower Saxony with the extra-high voltage grid on land. The wind power produced at sea will be transmitted as three-phase current to the DolWin epsilon converter platform, using the innovative 66-kV connection: the wind farm will be connected directly to the offshore platform. This eliminates the need for substations in the wind farms. DolWin epsilon converts the three-phase current into direct current and transports it a total of 130 kilometers to the onshore converter station in Emden/East. Here the electricity is converted back into three-phase current and fed into the extra-high voltage grid via the converter station. Due to the distance and the power to be transmitted, direct current is ideal for low-loss transport.

In May 2019, the transmission system operator TenneT selected the consortium of Aibel and Keppel FELS to implement key elements of the DolWin5 offshore grid connection project. Keppel FELS is one of the world's leading manufacturers of mobile offshore platforms. The approx. 80-meter long, 70-meter wide and 80-meter high steel structure of the DolWin epsilon offshore platform is manufactured at the company's shipyard in Singapore. After completion of the construction work and installation of the better part of the technical equipment DolWin epsilon will be transported from Singapore to Haugesund, Norway. There the company Aibel, one of the largest suppliers and service providers in the oil and gas as well as offshore wind sector, will install the converter and transformers. HITACHI ABB will supply the extra-high

voltage direct current technology as a subcontractor of Aibel and Keppel FELS. In addition to the converter system, the platform will provide accommodation for 50 people, a helicopter landing pad and a crane and lifeboat.

Innovative 66-kV direct connection

TenneT not only promotes the standardization of systems and processes. TenneT also develops innovative technologies to make grid connections even more efficient and cost-effective. One of these innovations is the 66-kV direct connection, which is being used for the first time in the DolWin5 project. This technology enables considerable cost savings, as the wind turbines are connected directly to TenneT's offshore platform via 66-kV three-phase power cables. Firstly, the transformer stations of the offshore wind farms are no longer needed. Secondly, 155 kV three-phase power cables are no longer required to connect TenneT's offshore platform with the transformer stations of the connected wind farms.



Caption: With the innovative 66 kV connection, the wind farms are directly connected to the TenneT offshore platform. Transformer stations in the offshore wind farms are therefore no longer necessary.

About DolWin5

DolWin5 is TenneT's eleventh offshore grid connection project to be implemented in extra-high voltage direct current transmission technology. DolWin5 has a transmission capacity of 900 megawatts. The respective DolWin epsilon offshore platform converts the three-phase current produced by wind turbines into direct current. From there, a 100 km long submarine cable runs in a southerly direction past the island of Borkum in the west to the landing point Hamswehrum, which is located at the mouth of the Ems in East Frisia. From here, a 30 km long land cable leads to the converter station in Emden, where the electricity is converted back into three-phase current and fed into the extra-high voltage grid on land. DolWin5 will connect the offshore wind farm Borkum Riffgrund 3 with the extra-high voltage grid on land.

Facts and figures about DolWin5

- 130-kilometer-long connection using high-voltage direct current (HVDC) transmission technology with a maximum transmission capacity of 900 megawatts
- 100 km sea cable, 30 km land cable
- Grid connection point: Emden/East
- Commissioning planned for 2024

Caption: Schematic course of the DolWin5 offshore grid connection project

TenneT

TenneT is a leading European grid operator (Transmission System Operator (TSO). We design, build, maintain and operate the high-voltage electricity grid in the Netherlands and large parts of Germany and facilitate the European energy market. We are committed to providing a secure and reliable supply of electricity, today and in the future, 24 hours a day, 365 days a year and to playing our role in driving the energy transition. We transport electricity over a network of approximately 23,500 kilometres of high-voltage connections, from wherever and however it's generated, to over 42 million end-users while keeping electricity supply and demand balanced at all times. With close to 5,000 employees, we achieve a turnover of 4.1 billion euros and a total asset value of EUR 23 billion. TenneT is one of the largest investors in national and international onshore and offshore electricity grids. TenneT makes every effort to meet the needs of society. This will require us all to take ownership, show courage and connect with each other.