



## 50Hertz HVDC LanWin3 STATION



Location: German sector of the North Sea

Construction Site: Cadiz - Spain

Contract Type: EPCI

Owner:

Total weight: Jacket 13,500 tons and Topsides 31,000 tons.

**Project Description:** Dragados Offshore, S.A.U. in Consortium with Siemens Energy Global GmbH & Co. KG, will develop, build and deliver a converter system in the North Sea and on land for 50Hertz.

The transmission system operator 50Hertz has awarded the consortium consisting of Dragados Offshore and Siemens Energy with the construction of a new converter system. It consists of an offshore converter for the North Sea grid connection project LanWin3 and an onshore converter. The EPCI contract includes all engineering services, the procurement of the necessary components as well as the construction, transportation and installation of the systems at sea and on land.

The offshore platform will be built at Dragados Offshore yard in Cádiz, southern Spain while the HVDC components for the converter will be manufactured at European production sites by Siemens Energy. The converter systems will follow the 2 GW standard currently being designed for transmission system operators TenneT, Amprion and now also 50Hertz.

The LanWin3 offshore grid connection will connect an offshore wind farm in the North Sea to the mainland. It is located around 120 kilometers northwest of Helgoland within the German Exclusive Economic Zone (EEZ). From there, a sea and land cable will run over 200 kilometers long to the grid connection point in the Heide area in North Friesland. On the land side, the offshore grid connection systems LanWin3 (50Hertz) and LanWin2 (TenneT) will be connected there to the NordOstLink, a new high-performance high-voltage direct current (HVDC) transmission line to be built in the direction of Mecklenburg-Western Pomerania. The onshore counterpart to the offshore converter is to be built near Schwerin in order to convert the direct current into alternating current. Both the offshore grid connections and the HVDC will have a voltage level of 525 kV to be able to transport large amounts of electricity with low losses.