

# SylWin1

205-kilometre-long and 864-megawatt-strong direct current connection



## Cable length

160 km submarine cable  
and 45 km land cable



## Grid connection point

Converter station  
Büttel



## Status of project

In operation  
since April 2015



Photo: Offshore  
converter platform  
SylWin alpha



### About the project

In April 2015, TenneT commissioned SylWin1, currently the longest offshore grid connection in the world. SylWin1 connects three wind farms 70 kilometres off the coast of Sylt to the mainland. With SylWin1 with an output of 864 megawatts, the wind farms can feed large quantities of wind power into the German power grid via a high-voltage direct current connection (HVDC). To transport the energy generated by a total of 232 wind

turbines to the onshore converter station in Büttel, a distance of 205 kilometers must be bridged: 160 kilometers of submarine cable and 45 kilometers of land cable. The submarine cable route in the coastal sea and the land cable run parallel to the route for the HelWin1 project, thus reducing the impact on nature and the environment. SylWin1 is one of the large-scale offshore grid connections and can supply more than one million households with clean wind energy.

TenneT is a leading European grid operator committed to a secure and reliable electricity supply - 24 hours a day, 365 days a year. We are shaping the energy transition for a sustainable energy future. As the first cross-border transmission system operator, we plan, build and operate an almost 24,500 kilometres long high and extra-high voltage grid in the Netherlands and Germany and are one of the largest investors in national and international electricity grids, on land and at sea. Every day, our 6,600 employees give their best and ensure with responsibility, courage and networking that more than 42 million end consumers can rely on a stable electricity supply.

**Lighting the way ahead together**

TenneT TSO GmbH  
 Bernecker Straße 70  
 95448 Bayreuth  
 Germany

Fon +49 (0)921 50740-0  
 E-Mail [info@tennet.eu](mailto:info@tennet.eu)  
[Twitter@TenneT\\_DE](https://twitter.com/TenneT_DE)  
[Instagram@tennet\\_de](https://www.instagram.com/tennet_de)  
[www.tennet.eu](http://www.tennet.eu)

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