

Project of common interest:

4.1

## Electricity interconnection

### Baltic Energy Market Interconnection Plan in electricity

#### COUNTRIES INVOLVED

Denmark (DK)  
Germany (DE)

#### PROJECT PROMOTERS

50Hertz Transmission (DE)  
www.50hertz.com  
Energinet.dk (DK)  
www.energinet.dk

#### BASIC TECHNICAL DATA

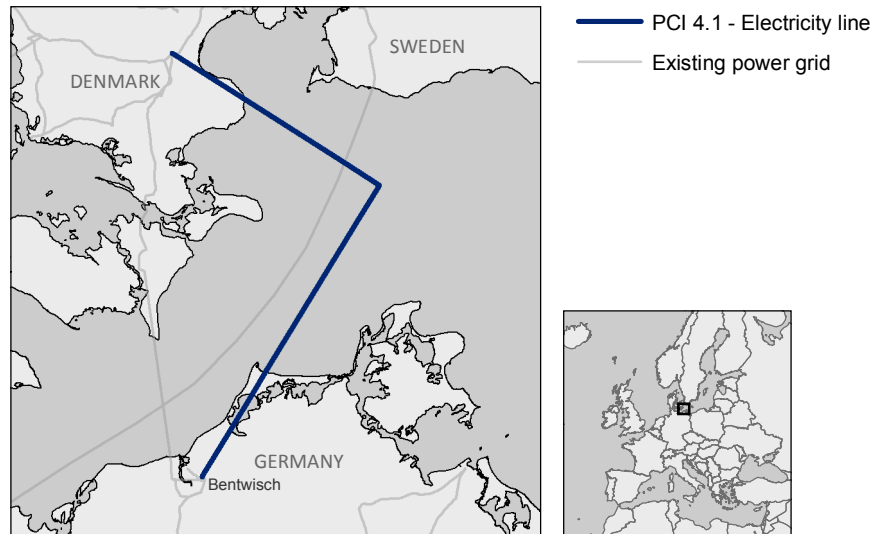
Capacity: 400 MW  
Power of the compressor station: 150 kV  
Voltage: 150 kV  
Length: 2 x 25 km

#### LOCATION

Ishøj / Bjæverskov Tolstrup Gaarde (DK)  
to Bentwisch (DE)

#### COMMISSIONING DATE

2018



Source: PLATTS, GISCO, European Commission

#### Definition

4.1 - Denmark — Germany interconnection between Ishøj / Bjæverskov Tolstrup Gaarde (DK) and Bentwisch (DE) via offshore windparks Kriegers Flak (DK) and Baltic 1 and 2 (DE) [currently known as "Kriegers Flak Combined Grid Solution"]\*

#### Type of technology employed

The Kriegers Flak Combined Grid Solution is a new 400 MW offshore interconnection between Bentwisch (DE) and Ishøj/ Bjæverskov (DK) via the offshore wind farms Kriegers Flak (DK), Baltic 1 and 2 (DE). As Eastern Denmark and Germany are two different synchronous areas, the frequency transformation is necessary. This will be done by two voltage source converters (VSC) as back to back solution (B2B) that convert the alternating current (AC) from the Nordic synchronous area into direct current (DC) and directly

back to AC, now adapted to the Continental European synchronous area. The project envisages three main components: 400MW HVDC VSC B2B onshore converter station, offshore substation extensions, approximately 2x25 km sea cables with a voltage of 150 kV, as well as the extension of onshore substations in Bentwisch and Ishøj/ Bjæverskov, C-T ype-Filter (MSCDN) and shunt reactor.

#### Implementation status

Under construction

#### LAST UPDATE

March 2018

Energy

Note: The project location as depicted on the map is indicative only. The final location will be determined once the permit granting procedure has been completed.