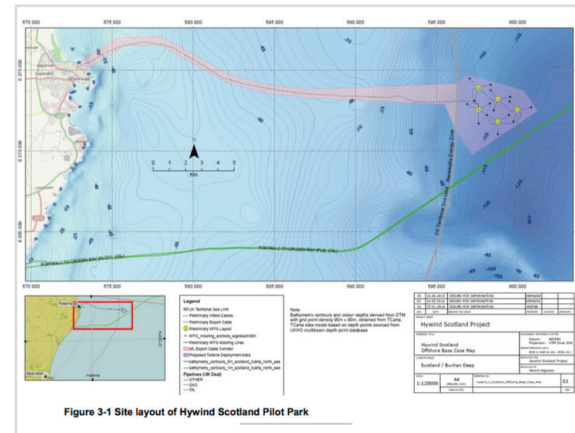


Hywind Scotland

Name Hywind Scotland
Country UK
Development Type Commercial
Total Capacity 30 MW
Project Status Online
Online Target 2017



Source: Equinor



Source: Equinor

PRINCIPALS

Developer Hywind Scotland
Owners Equinor
Operator Equinor
Floater Designer Equinor
Design Country Norway
Class DNV GL

FINANCIALS

Project Value 210 mil GBP
Capex -
Opex -
Feed in Price -
LCoE 135
FID Y
Financial Close 3-Nov-15

MILESTONES

WTG Y
Consent Y
Financed Y
Grid conn. Y

STATUS

Bidding Completed
1st Contracts Y
Status Notes Fully commissioned, high capacity rate.

ONLINE TARGET

Online Year 2017
Month 10
Quarter -
Decommissioning Year 2037

PARTNERS

Partners Masdar

LOCATION

Sea North Sea
Shore Connect Peterhead
Shore Distance 25 km
Latitude 57.5
Longitude -1.2
LatLong Estimated N

TURBINE

Total MW 30 MW
Turbine Manufacturer Siemens
Model SWT 6.0-120
Units per Floater 1
Total No. Units 5
MW 6 MW
Wind Speed 10.1 m/s
Horizontal / Vertical Axle H
Hub Height 98 m
Blade Diameter 154 m
No. Blades 3
Blade Weight -
Nacelle Weight 350 t
Heaviest Component -
Contract Value -
Delivery -

FLOATER

Designer Equinor
Design Name Hywind II
Hull Shape Spar
Design Generation 2
Minimum Water Depth 75 m
TRL 6
No. Columns 1
Tons/MW -
Weight / Mass 12000 t
Steel Weight 2300 t
Concrete Weight -
Ballast Weight 5000 t
Floater Length -
Floater Width / Diameter 14.5 m
Structure Height 91 m
FTU Height 178 m
Draft 78 m



Data from 06-2018

Floating Turbine Unit (FTU)

ENGINEERING

Contractor	Olav Olsen
Contract Type	-
Award Date	-
Contract Value	-
Client	Equinor
Start	-
Completion	27-Jun-17

CONSTRUCTION

Contractor	Navantia
Contract Type	EPC
Award Date	-
Contract Value	-
Client	Equinor
Start	11-Feb-16
Completion	27-May-17

ASSEMBLY

Location	Stord
Start	27-May-17
Completion	3-Jul-18

TOWING

Contractor	Technip
Planned Start	43299

INSTALLATION

Contractor	-
Contract Type	-
Award Date	-
Contract Value	-
Client	-
Start	25-Jul-18
Completion	15-Aug-18

COMMISSIONING

Comm. Contractor	Siem
Support Vessel	Siem Moxie
Contract Type	-
Contract Value	-
Client	-
Start	25-Aug-18

Mooring Systems

DESIGN

System	Catenary
Designer	NGI, Aibel
Design Water Depth	-
Min. Water Depth	105 m
Max. Water Depth	-
Soil Condition	very soft to firm clay
Req. Holding Power	-

MOORING LINES

No. Lines per Unit	3
Line A Type	Chain, studless
Line B Type	-
Line A Manufacturer	Vicinay
Line A Length	900 m
Line A Diameter	500 cm
No. Total Lines	15
Line B Manufacturer	-
Line B Length	-
Line B Diameter	-

CONTRACTOR

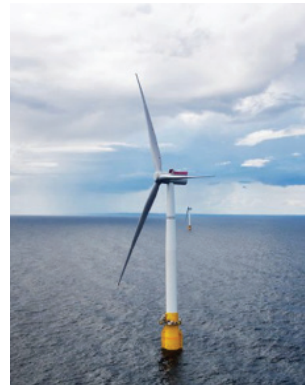
System Contractor	McGregor
Contract Type	-
Contract Value	-

ANCHORS

Manufacturer	Isleburn
Anchor Type	Suction
Anchor Model	-
Anchor Weight	-
Connectors	Vicinay

MOORING INSTALL

Install Contractor	TechnipFMC, Deep Explorer
Start	22-Apr-17



Source: Equinor

Cabling

EXPORT CABLES

Cable Quantity	1
Cable KV	33 kV
Cable Length	-
Core Quantity	-
Cable Diameter	-

EXPORT MANUFACTURER

Manufacturer	Nexans
Contract Type	-
Client	Equinor
Contract Value	10.2 mil EUR
Completion	-

ARRAY CABLES

Cable Quantity	4
Cable KV	33 kV
Cable Length	-
Core Quantity	-
Cable Diameter	169 cm
Dynamic Connections	Y

ARRAY MANUFACTURER

Manufacturer	Nexans
Contract Type	-
Client	Equinor
Contract Value	10.2 mil EUR
Buoyancy	Bardot

CABLE INSTALL

Contractor	-
Contract Type	-
Contract Value	Equinor
Client	-
Installation Vessel	Skandi Acergy
Start	42948
Completion	1-Sep-17

Data from 06-2018



FTU Sub-Components & Services

TRANSITION PEECE

Diameter 14 m
Height 7.5 m
Weight 148 t
Manufacturer -
Contract Type -
Client -

TOWER

Diameter 7.5 m
Height 83 m
Weight 670 t
Yard Navacel
Contractor Navacel
Contract -
Client -
Contract Value -

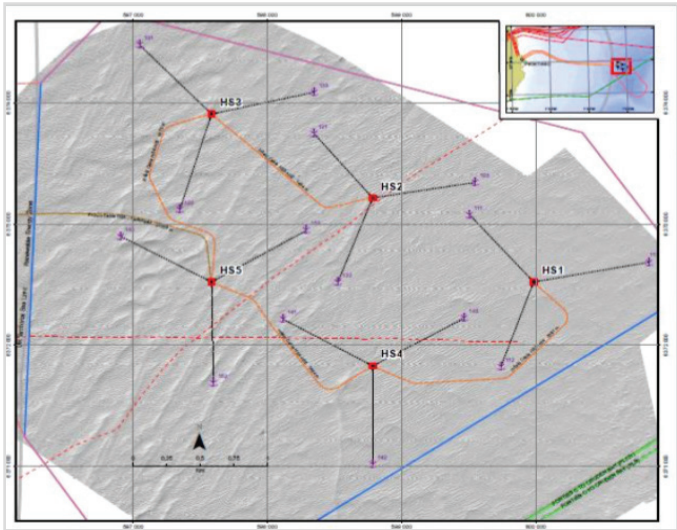
SUBSTATION

Yes / No Y
Quantity 1
Capacity 33 kV
Location Type Onshore
Contractor -
Yard Balfour Beattie
Contract Type EPCI
Contract Value -
Client Equinor
Installation Contractor -
Installation Contract Type -
Installation Contract Value 5.5 mil GBP
Installation Client -
Start -
Completion -

SURVEY / SITE PREP

Geo Services Fugro
Site Prep Edda Fon

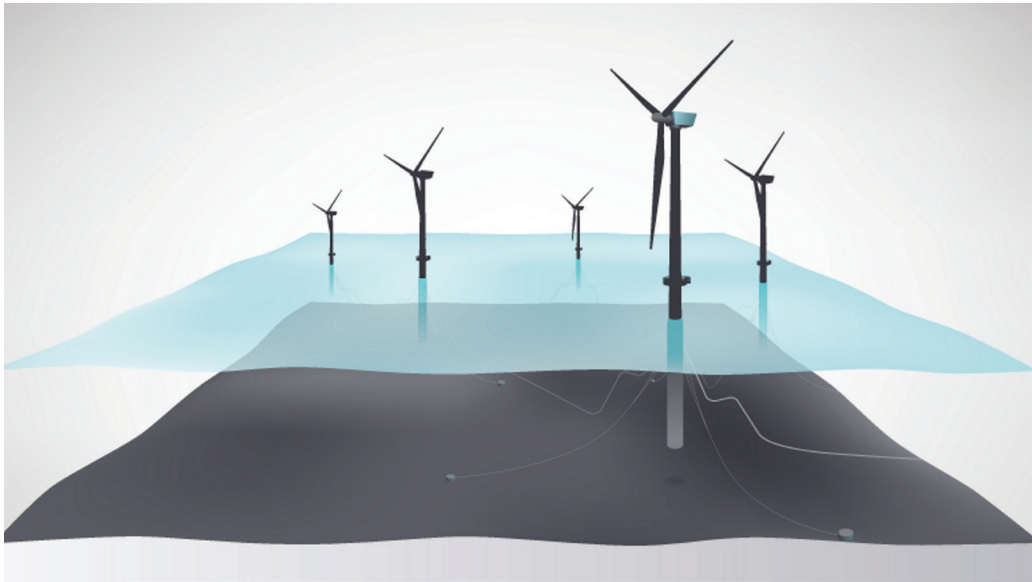
O&M
Shore Base Peterhead
Vessel Contractor -
SOV Vessel -
Gangway -



Source: Equinor

PROJECT WEBSITE

Website <https://www.statoil.com/en/what-we-do/hywind-where-the-wind-takes-us.html>



Source: Equinor

Data from 06-2018

