



Rampion Operations and Maintenance Meet the Buyer

Pete Andrews
Rampion Plant Manager

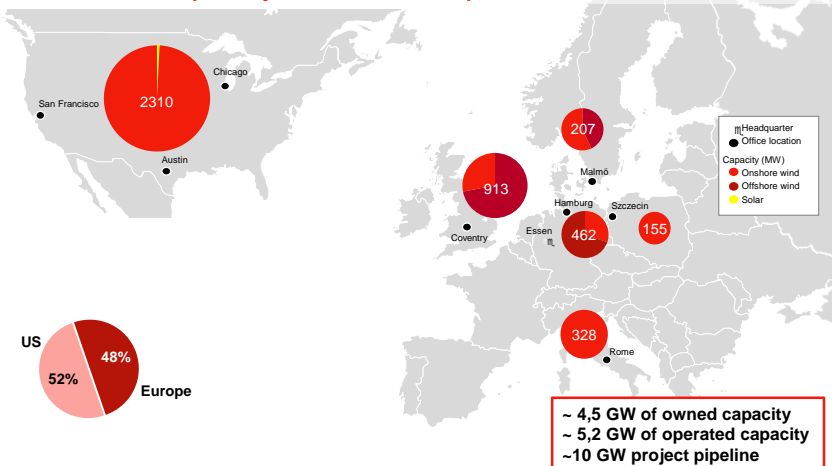


Agenda

- 1. Introduction**
2. General O&M Strategy
3. Operational Timescales
4. Work scope breakdown



E.ON currently owns a portfolio of more than 4.5 GW wind and solar capacity across Europe and North America¹

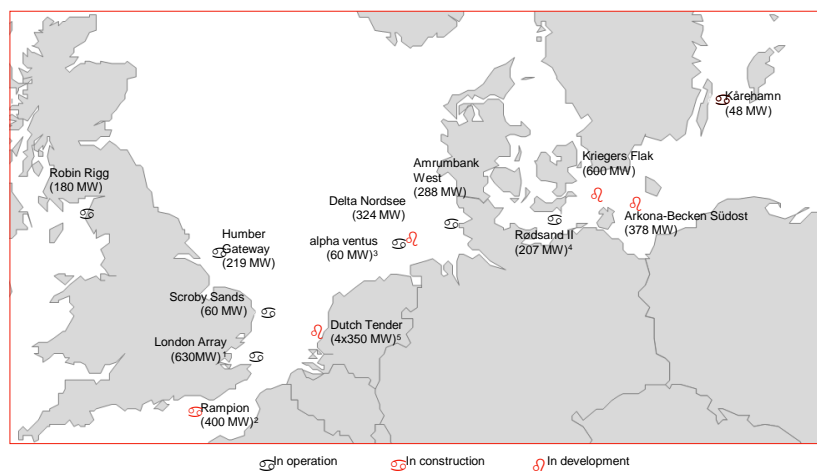


3

¹ Forecasted 2015 FY pro-rata share (includes Humber + Amrumbank both at 100%)



E.ON ranks among the leading offshore wind power operators – and further developing in Offshore



1. E.ON share 30% (180 MW)
2. E.ON share 50% (200 MW)
3. E.ON share 20% (16 MW)
4. E.ON share 20% (41 MW)
5. Four tender in 2016 each 350 MW

4



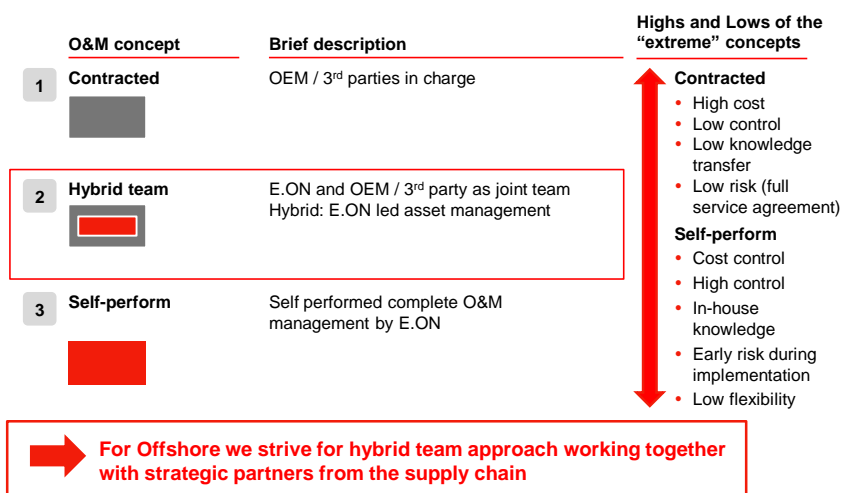
4

Agenda

1. Introduction
- 2. General O&M Strategy**
3. Operational Timescales
4. Work scope breakdown



Maintenance concepts: from outsourced to insourced



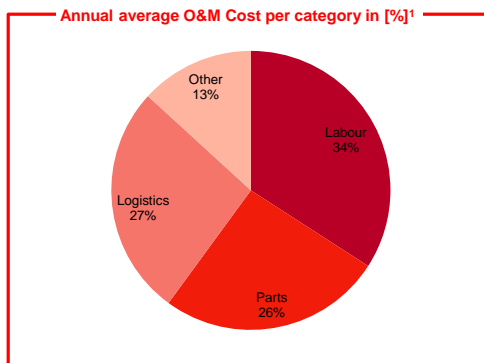
 OEM / 3rd party
  E.ON



Breakdown of O&M costs

Over the life of the wind farm total OPEX (operational expenditure) is approximately equivalent to the initial construction capital

50% of OPEX is variable O&M cost [remainder: leases and transmission fees]



⁸
Typical Offshore wind farm in UK

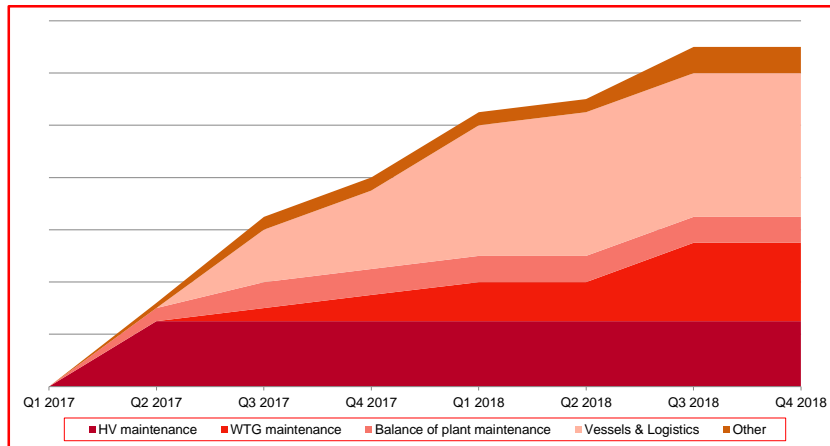
Agenda

1. Introduction
2. General O&M Strategy
- 3. Operational Timescales**
4. Work scope breakdown



⁹

Contract Volume Ramp-up



10

Agenda

1. Introduction
2. General O&M Strategy
3. Operational Timescales
- 4. Work scope breakdown**



11

Work Scope	E.ON	E.ON Subcontract	MYOW	MYOW Subcontract
Wind Turbine Generator (WTG)				
Scheduled Maintenance				
Labour				
Consumables & Tooling				
Statutory inspections - Crane, Service Lift				
Unscheduled Maintenance				
Component supply				
Labour & Tooling				
Foundations - Above Water				
Inspections and Repair				
Statutory Inspections of Fall Arrest Equipment				
Davit cranes - Inspection, Statutory Inspection, Service				
Foundations - Subsea				
Scour assessment				
Grout Seal inspection				
Anode inspection				
Cable route and termination inspections				
Electrical BOP - WTG - Transformer/Switchgear				
HV inspections and maintenance				
Cables (Array & Export)				
Periodic Subsea Inspections				
Burial/Scour Survey				
Cable termination inspections				
Onshore Substation				
133kV Switchgear Inspections				
Oil Sampling of the 33kV/132kV Substation Grid Transformer				
Oil sampling of the auxiliary transformer				
Building Integrity and Grounds				
SCADA System Hardware and Remote Access				
Vessels				
CTV supply and operation				
UUV				
Fuel				
WF Operations				
Radio VHF Communications Equipment				
Weather forecasting & updates				
Lifting Equipment				
Warehouse vehicles				
PPE				
Provision of HV Authorised Persons				
Environmental Management				
Environmental consent monitoring				
Operations Base				
Site up keep				
Waste Management				
CCTV				
HVAC				
Site Security				
Cleaning services				



ANY QUESTIONS?

