

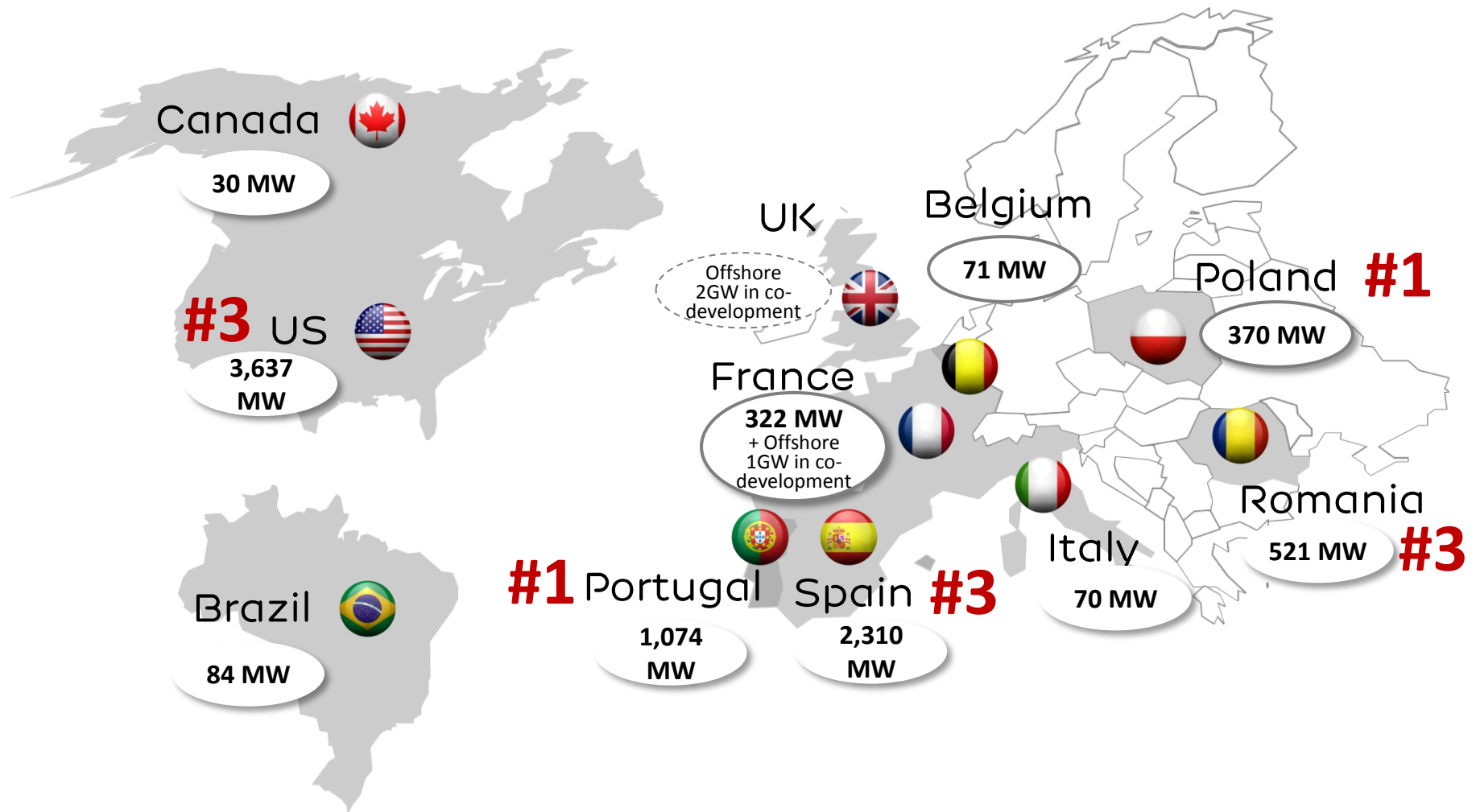
ENCUENTRO HISPANO-BRITÁNICO SOBRE ENERGÍA EÓLICA MARINA

Financiación y logística

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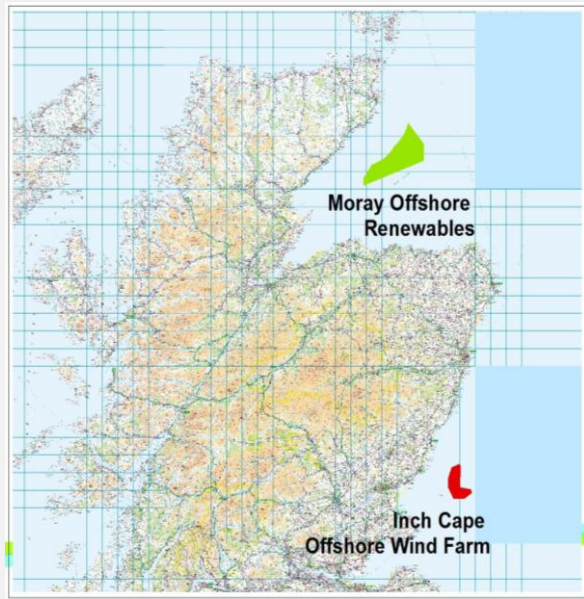
EDPR is part of the EDP Group with a top quality and diversified portfolio of 8.5 GW in 2013



In 2013 EBITDA was €950M and net profit €145M

EDPR co-develops 2 sites off the east coast of Scotland

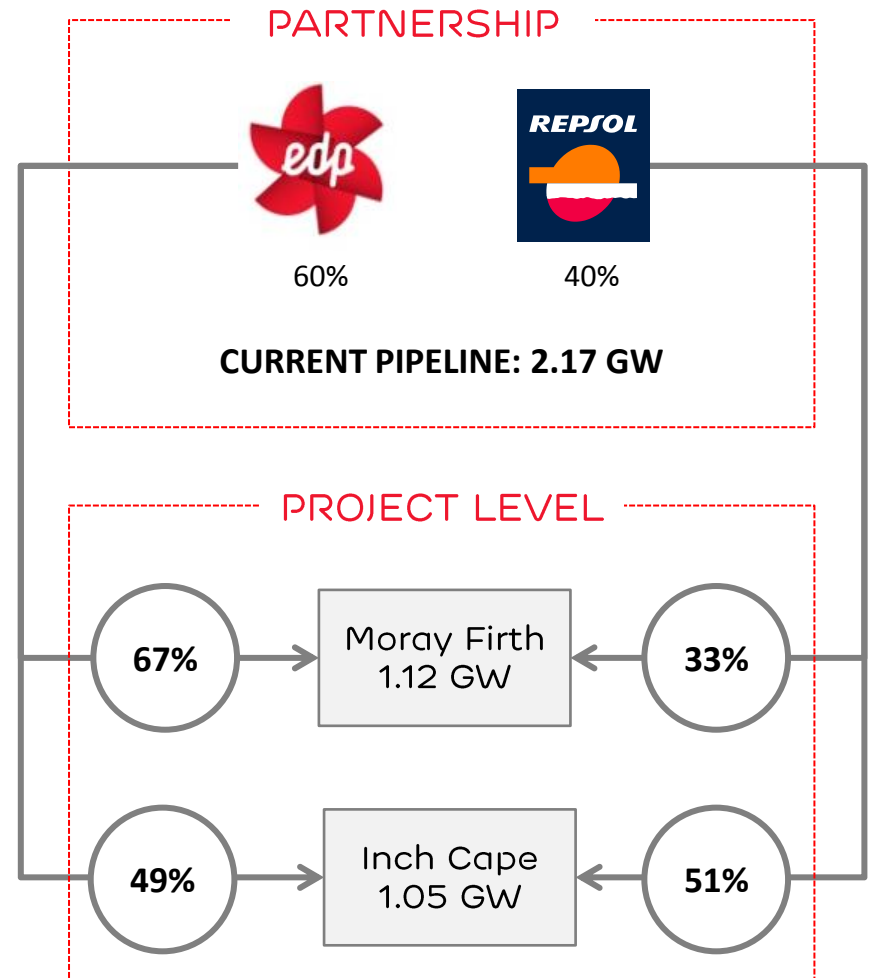
PROJECTS' FEATURES



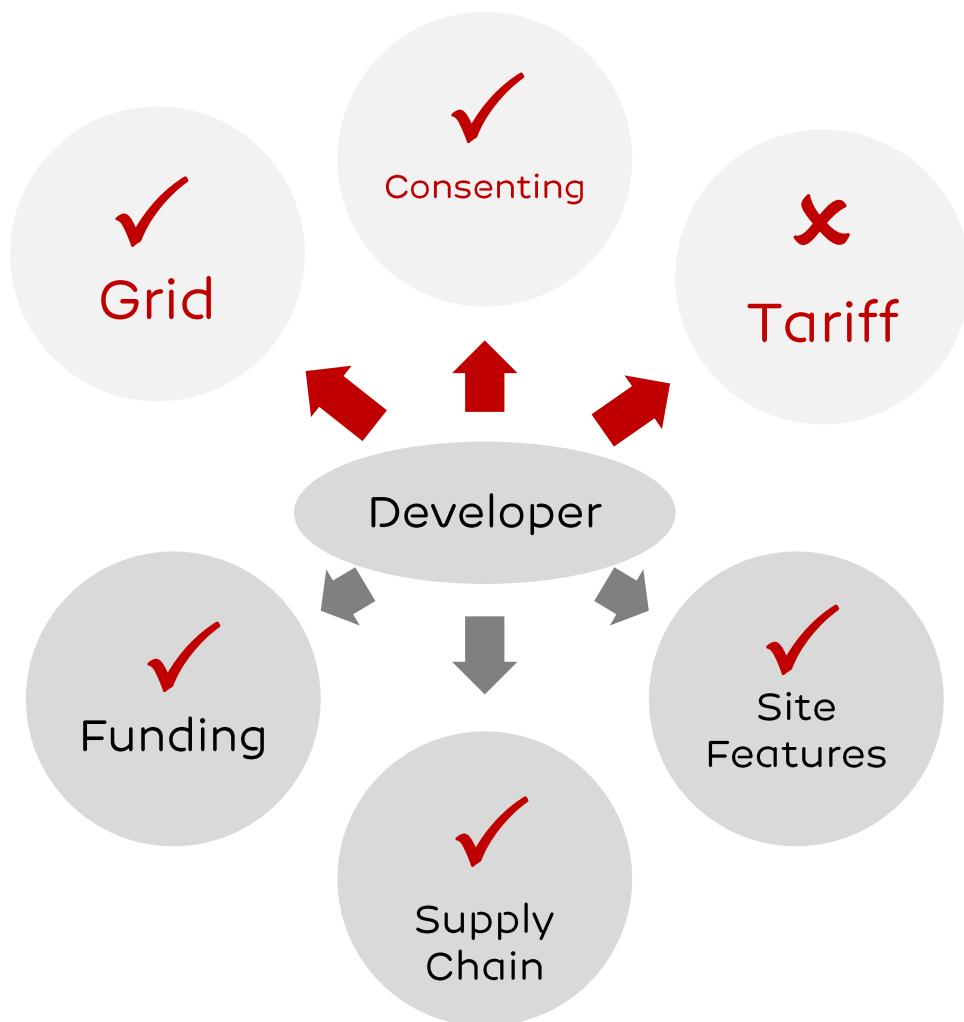
Key projects figures

	Inch Cape	Moray Firth
Max Capacity	1050 MW	1116 MW
Capacity (Project 1)	c. 500 MW	c. 500 MW
Area	150 km ²	520 km ²
Water Depth	40-55 m	35-55 m
DevEx (end 2013)	30M€	21M€
Average Wind speed	9.51 m/s	9.75 m/s

STRUCTURE OF COOPERATION BETWEEN EDPR AND REPSOL



Regulation must fit the scale of the investment to enable financing



GOVERNMENTS WANT:

Best value for consumers

- Reduced cost to consumers
- Increase energy security
- Bring jobs and industry where possible

INVESTORS & DEVELOPERS WANT:

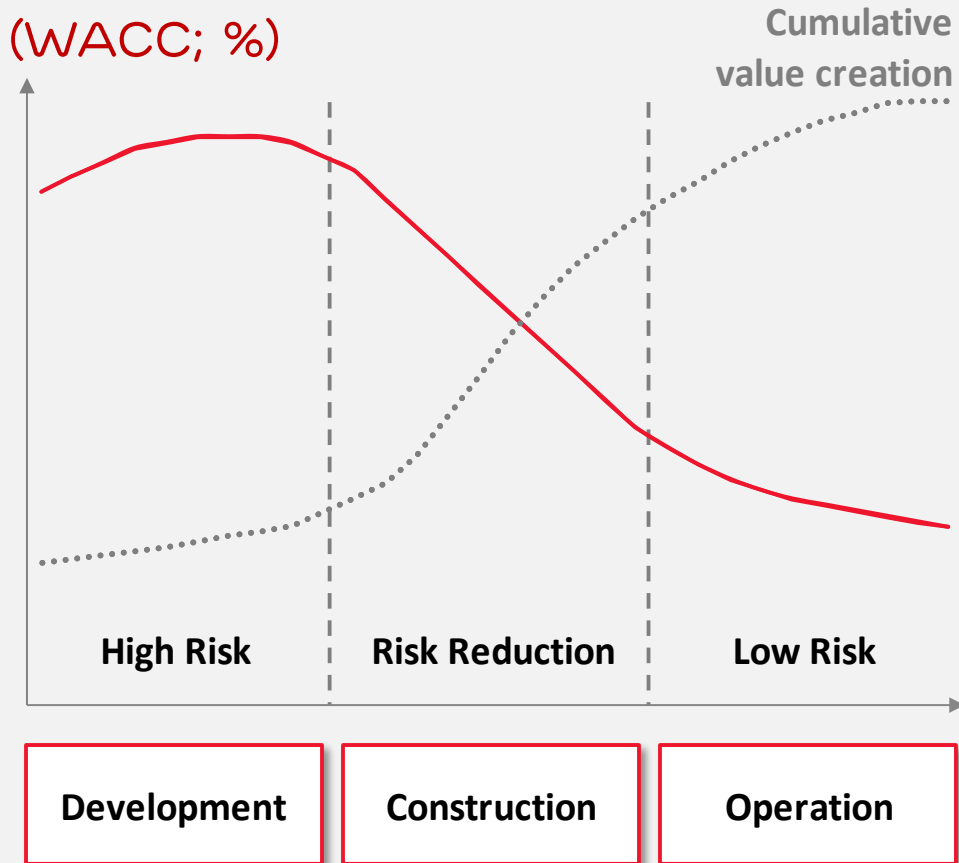
Certainty and stability

- Reasonable return under stress-tested cases
- Long term visibility & stability support
- Liquid assets to recycle capital
- Ability to incorporate new solutions to reduce costs

Tariff uncertainty brings an additional challenge to the financing activities

Suitable regulation & project de-risking will... attract new capital to deliver UK targets

COST OF CAPITAL (WACC) THROUGHOUT THE LIFE CYCLE OF A WIND FARM

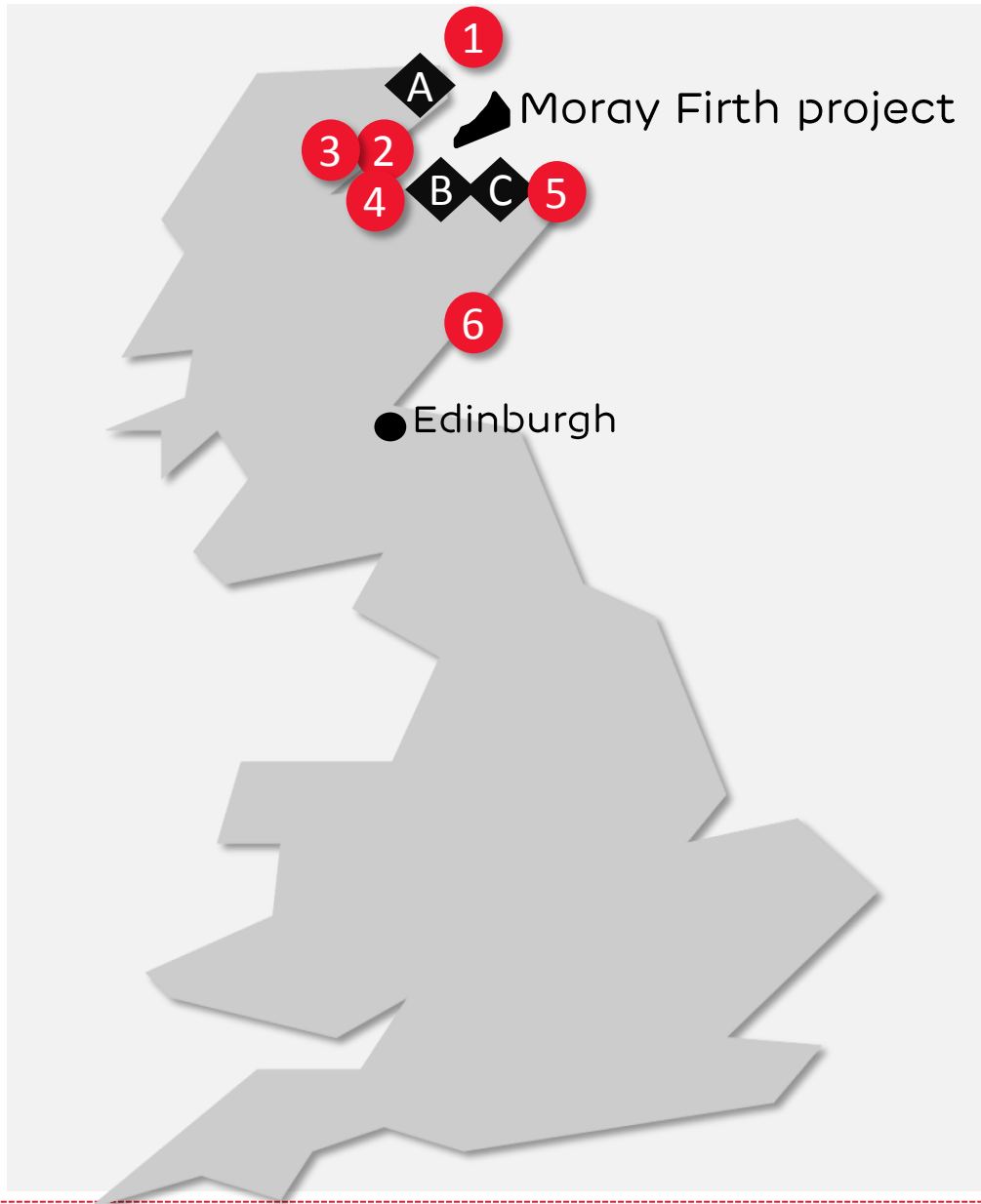


DEVELOPERS CREATE VALUE BY
REDUCING PROJECT RISK, ALLOWING
FOR CAPITAL RECYCLING AND NEW
INVESTOR ENTRY

Regulation to fit the scale of investment

- Define an adequate capacity to support cost reduction
- Recognise the financial life of the assets (most often 25 years)
- Allow for value creation at each stage of the project life cycle so investors with different risk appetite can enter in due time
- Benefits and penalties should be imposed upon things in the control of the developer

Ports infrastructure: EDPR is still exploring every option in Scotland and rest of the UK for Moray Firth project



SCOTTISH PORTS: INSTALLATION PHASE

- 1 Lyness (Orkney; 41nm)
- 2 Nigg (47nm)
- 3 Invergordon (51nm)
- 4 Ardersier (51nm)
- 5 Peterhead (59nm)
- 6 Dundee (148nm)

SCOTTISH PORTS: O&M PHASE

- A Wick
- B Buckie
- C Fraserburgh



renováveis
powered by nature

Lyness



renováveis



Closest IDP by distance, deepwater quayside, medium storage capacity. Potential Barge Storage. Regional development status – good availability

Weaknesses / threats: Remote, very limited scope for anything other than storage. Limited plant availability. Pentland Firth, therefore self propelled vessels only.

Particulars	
Deepwater berths	Yes
Storage	Yes
Heavy lift quays	Yes
Logistics Services	Limited
Towage	Yes
Anchorage	Yes
Fabrication	No
Distance	41
Estimated Time (10 Knots)	6h



Deepwater quayside, close to site, significant storage capacity
Weaknesses / threats: O&G work neutralising quayside

Particulars	
Deepwater quay	Yes
Heavy lift quays	Yes
Storage	Yes
Logistics Services	Yes
Towage	Yes
Anchorage	Yes
Fabrication	Yes
Distance Estimated Time (10 Knots)	47 6,5h

Invergordon



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Deepwater quayside, close to site, significant storage capacity
Weaknesses / threats: O&G work neutralising quayside

Particulars	
Deepwater quay	Yes
Heavy lift quays	Yes
Storage	Limited
Logistics Services	Yes
Towage	Yes
Anchorage	Yes
Fabrication	Yes
Distance	51
Estimated Time (10 Knots)	6,5h



The site provides significant opportunities for fabrication, storage and logistics support for foundation installation:
Weaknesses / threats: The IDP is available subject to enabling construction

Particulars	
Deepwater quay	To be developed
Heavy lift quays	To be developed
Storage	Yes
Logistics Services	No
Towage	Yes
Anchorage	Limited
Fabrication	No
Distance Estimated Time (10 Knots)	51nm 6,5h

Peterhead



Deepwater quayside, limited storage capacity excluding S Barge Storage however exposed quaysides:
 Weaknesses / threats: Exposed to Easterly weather. O&C trust IDP therefore difficult to secure quays for use.

Particulars	
Deepwater quay	Yes *
Heavy lift quays	Yes
Storage	Limited
Logistics Services	Yes
Towage	Yes
Anchorage	No
Fabrication	No
Distance	59
Estimated Time (10 Knots)	7h

Dundee



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Particulars	
Deepwater quay	Yes
Heavy lift quays	Yes
Storage	Yes
Logistics Services	Yes
Towage	Yes
Anchorage	Yes
Fabrication	Yes
Distance	148
Estimated Time (10 Knots)	18h

Deepwater quayside, significant storage capacity probably €
 Further potential at a price:
 Weaknesses / threats: Distance, O&G work neutralising quayside