



Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

Pentland Firth and Orkney Waters: Ambitious for Scotland

Audrey MacIver

Joint Head of Energy, HIE

20 May 2010



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Marine Energy in Scotland

- European Marine Energy Centre
- Favourable ROCs for wave and tidal
- Financial R,D&D support
 - WATES, WATERS
- Saltire Prize



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Estimated economic benefits

- Scenarios for growth of Scottish marine energy sector

– 0.5 GW	– 2,850 jobs	- £1.3bn
– 1 GW	– 5,000 jobs	- £2.4bn
– 2 GW	– 10,000 jobs	- £4.7bn

(FREDS Marine Energy Group, 2009)

- Further work to establish O&M values

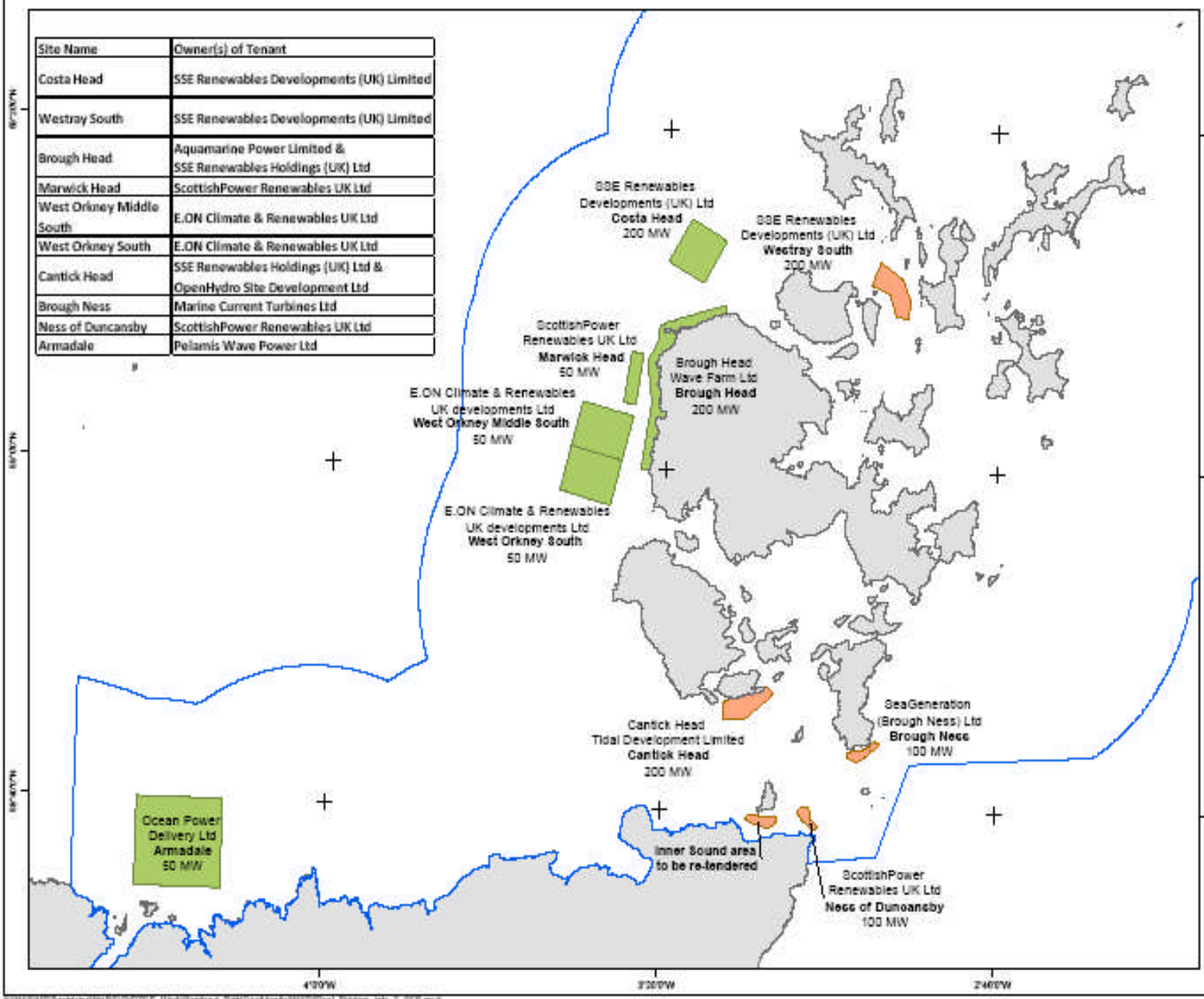
Pentland Firth & Orkney Waters: Ambitious for Scotland



- World's 1st commercial scale wave and tidal leasing programme
- Deliver 1.2 GW by 2020
- 6 wave & 4 tidal leases + Inner Sound
- Estimated deployment schedule 2014 +
- Estimated investment £5bn

Pentland Firth and Orkney Waters Round 1 Development Sites

Site Name	Owner(s) of Tenant
Costa Head	SSE Renewables Developments (UK) Limited
Westray South	SSE Renewables Developments (UK) Limited
Brough Head	Aquamarine Power Limited & SSE Renewables Holdings (UK) Ltd
Marwick Head	ScottishPower Renewables UK Ltd
West Orkney Middle South	E.ON Climate & Renewables UK Ltd
West Orkney South	E.ON Climate & Renewables UK Ltd
Cantick Head	SSE Renewables Holdings (UK) Ltd & OpenHydro Site Development Ltd
Brough Ness	Marine Current Turbines Ltd
Ness of Duncansby	ScottishPower Renewables UK Ltd
Armadale	Pelamis Wave Power Ltd



- Development Sites**
- Tidal
 - Wave
 - Strategic Area
 - United Kingdom
 - Europe

MaRS
Marine Resource System

Round 1 Development Sites
29 March 2010



1:500,000 Author: KR
Size: A4 QA: JM

Positions shown relative to WGS 84
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15 New Burlington Place London, W1D 3NQ
Tel: 020 7651 5200

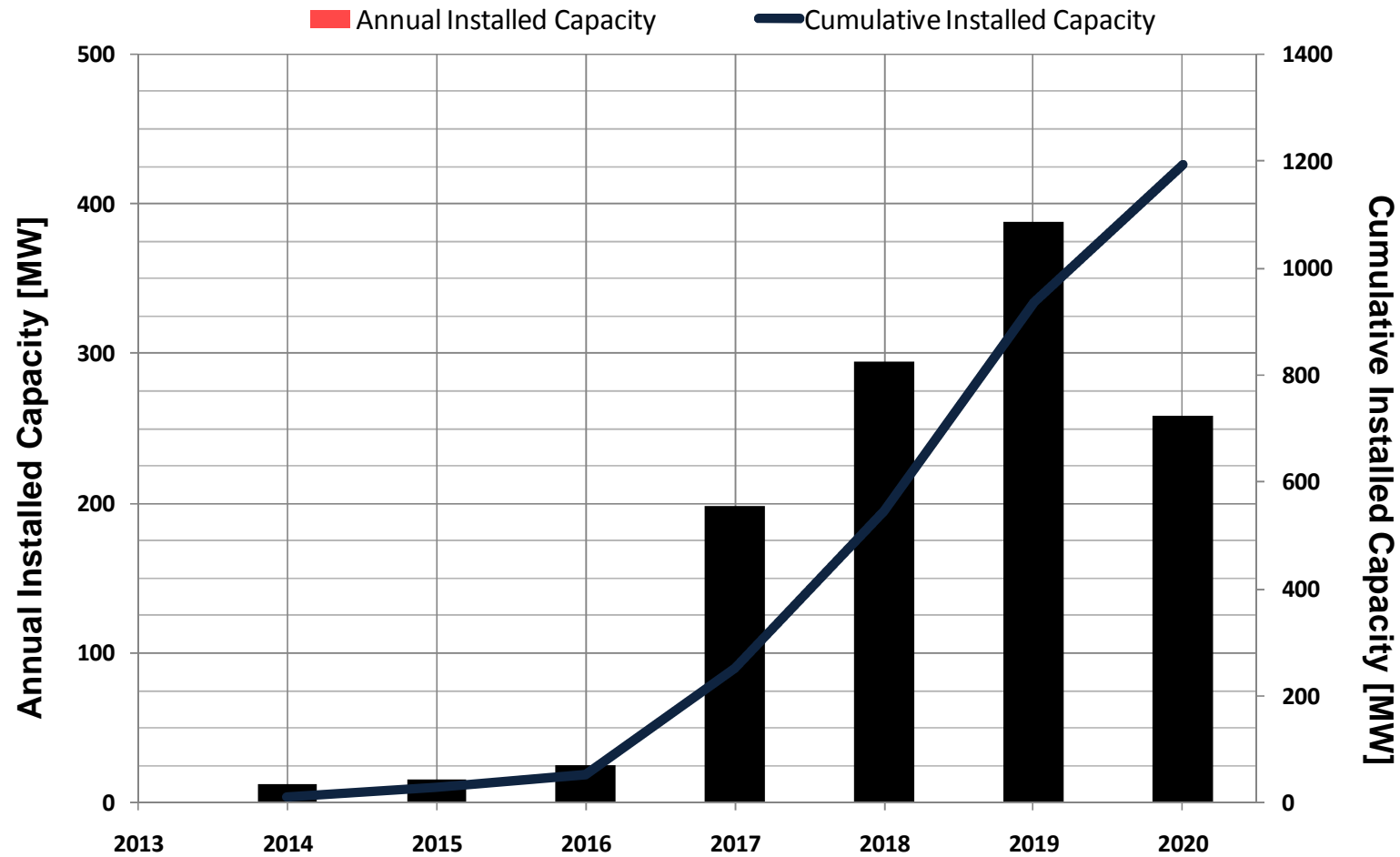
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Tel: 0131 260 0070

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Build out timescales





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Challenges include ...

- Technology status
- Finance
- Risk
- Company status
- Cost of energy
- Economies of scale
- Offshore wind
- Support facilities
- Government support
- Grid access and charging

Pentland Firth & Orkney Waters: Delivery

- Co-ordination Committee
 - Ensure alignment within public sector
- Delivery Group
 - Industry and public sector working together to address generic barriers/challenges including grid access, supply chain development, planning and consenting
- Developer Forum
 - Industry and TCE focus on enabling actions



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Conclusions

- Favourable policy environment and support framework for marine energy.
- Ambitious programme for Pentland Firth and Orkney Waters.
- Shared commitment to realising the ambition.



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Thank you !