

The Beatrice Windfarm Demonstrator (Part of the European DOWNVIInD Programme)

TALISMAN
ENERGY

 Scottish and Southern
Energy plc



dti



SCOTTISH EXECUTIVE

- Distant Offshore Windfarms No Visual Intrusion In Deepwater

DOWNVIInD Programme

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- Renewable Energy R&D
 - Largest programme in Europe
- £35 million cost funded by
 - Private Capital
 - » Talisman and SSE
 - Public Grants
 - » Commission / DTI / Executive
 - Participants contributions in kind
- Programme Objectives
 - Research
 - » Understand environment and technology
 - Demonstrator
 - » Show windfarms viable in 50m
 - » Pioneer deepwater / distant from shore developments
 - Operations
 - » Learn how to operate



Structure of DOWNVIInD Programme

Project Management and Dissemination of Results

Research

Demonstrator

Environment

Ecology
Socio economics
Economics

Electricity

Collection
Transmission
Grid
Stability

O&M

Access
Safety
Routines
Costs

Structure

Loads
Design
Fabrication
Standards
Decommissioning

Demonstrator

Consent
Surveys
Procurement
Manufacture
Tie-in
Commissioning
Metmast
O&M
Verification

Research Programme fully funded within FP6 programme

Contributions from Commission and Participants

World Class Team led from Aberdeen



Universities	Agencies	Public Companies	SME's
Stockholm Lund KTH Strathclyde Aberdeen	ECN RISO	Talisman SSE EdF Airicole Germanischer Lloyd Repower Scaldis	PB Consulting Hammarlund Consulting Teknigruppen Nautilus

Significant UK participation in Research and Demonstrator Programme

Project involves more than 60 organisations 70% from UK

Research:

Aberdeen University: Environment

Strathclyde University: Transmission / Mass fabrication / Value of ROCs

Demonstrator

Surveys / Consent / Procurement / Design and Project Management

Fabrication / Assembly / Tie-in

Impact of Demonstrator Project

- **Unique combination of skills**
 - Two of Scotland's largest companies pioneering offshore wind
 - » Oil and Gas / Utility
- **Jobs**
 - Project created more than 750 jobs
 - » More than 70% in the UK
- **Technology**
 - Brought offshore skills to wind industry
 - » Transforming envelope for offshore wind development
- **Opportunity**
 - Make offshore wind development in Scotland possible
 - Showcase for UK offshore technology



Further Information

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Websites

www.beatricewind.co.uk

www.downvind.com