

Directorate-General
for Energy
and Transport

European Energy Programme for Recovery



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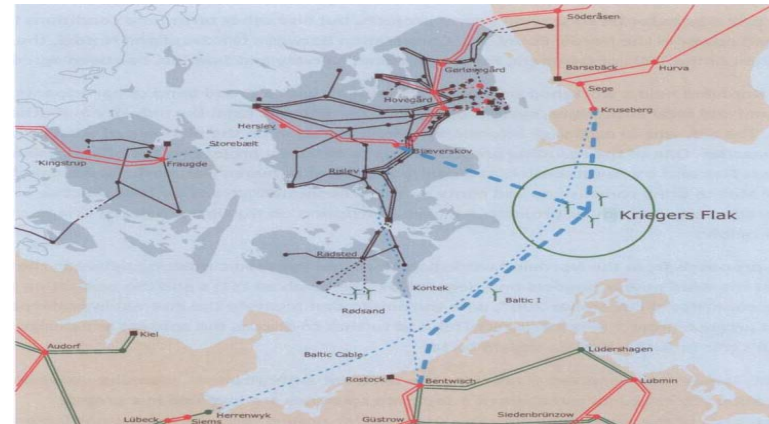
Recovery Plan - challenges for wind sector

- Proposed actions are derived from the EWI
 - » Offshore – focus on increasing power generation capacity of the largest turbines – Grid integration – variability of the wind energy production
- Criteria used
 - » Large scale demonstration /innovation
 - » Mature projects
 - » Interconnection / integrative approach
 - » Technically: deeper waters, further from the shore, larger turbines, efficient manufacturing, management of wind farms as virtual power plants

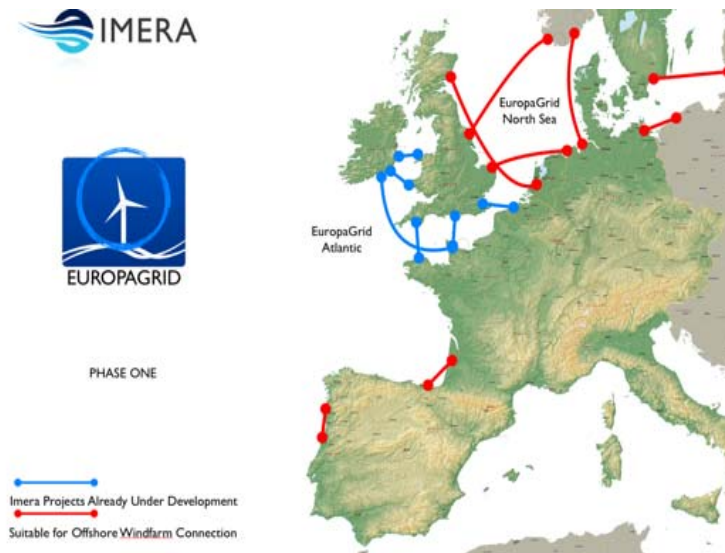
● Implementation through projects 1/2

● *Grid integration*

» *Baltic –Kriegers Flak– joint interconnection*



» *North sea grid – modular development and virtual offshore operation*



● Implementation through projects 2/2

● ***New turbines, structures and components, manufacturing capacities***

- » *Borkum West II - Bard 1 - Nordsee Ost - Global Tech I* - 400 MW on each location
- » *Aberdeen offshore wind farm* – testing of multi MW turbines, innovative structures and optimising manufacturing capacities
- » *Thornton Bank*

● APPLICATION FORM

- Structure of the Submission Form
 - » Cover page and Table of Content
 - » PART 1: Information on the Applicants
 - » PART 2: Information on the **Project/Action** *
 - » PART 3: Budget summary
 - » PART 4: Other sources of external finance
 - » PART 5: Declaration by the Applicant
 - » Annexes

Project

- refers to a physical or technological infrastructure which pursues the completion of a higher indivisible objective

Action

- refers to the part of the project for which a Community financial aid is requested



● APPLICATION FORM

● ANNEX 5 : TECHNICAL DESCRIPTION

- **Project description**
- **Implementation**
- **Resources to be committed**
- **Impact**

● APPLICATION FORM

● 1. PROJECT DESCRIPTION (I)

- Needs to cover the whole investment phase of the project
- Needs to show that substantial investment related expenditures can be made still in 2010
- Detailed technical description and a financing description
- Total costs – Eligible costs – Requested EC grant (for each beneficiary)
- Other funding sources

Very precise, focussed and not longer than 20-30 pages

● APPLICATION FORM

● 1. PROJECT DESCRIPTION (II)

- **General concept and status quo of the project**
- **Work plan**
- **Overall strategy and general description**
- **Risk management and contingency plan**
- **WPs [description, timing, components]**
- **Deliverables list**
- **List of milestones**

● APPLICATION FORM

● 2. IMPLEMENTATION

- **Management structure and procedures**
- **Beneficiaries**
- **Consortium as a whole (incl. subcontractors)**

● Definitions (1)

● **Maturity of the action**

- » defined as reaching the investment stage, incurring substantial capital expenditure by the end of 2010

● **Investment stage**

- » the phase of a project during which construction takes place and capital costs are incurred (orders - contracts)

● Definitions (2)

● Capital cost incurred

- » Contracts and orders placed for the purchase of material - contracts for civil engineering works as well as the realisation of the technical studies necessary to implement the actions

● APPLICATION FORM

● 3. RESOURCES TO BE COMMITTED

- **Detailed cost plan for the full project**
- **Planned expenditures until end 2010**
- **Financing Plan**

● APPLICATION FORM

● 4. IMPACT

- **Strategic impact**
- **Exploitation of results and dissemination plan**
- **Consortium agreement recommended**

● How to apply to EEPR funds

- » Use the application form (mandatory)
- » Pay special attention to all necessary signatures, dates and stamps throughout the application form
- » Submit by registered mail, private courier or deliver by hand
- » Respect the deadline of **15 July 2009**
- » Be aware that:
 - Good argumentation is required

● Indicative Action Plan for EERP implementation Milestones in 2009

Tasks	Dates
● Launch call for proposals	18 May
● Info day for applicants	3 June
● Entering into force of the Regulation	~ July
● Close call for proposals	15 July
● Evaluation for OWE (internal)	August
● Proposal by the Commission	September
● Committee + Negotiation	October
● Grant Agreements	November/December



- Milestones in 2010

- Report to the Council 18 December 2009
- Report to EP and Council on March 2010
- Commission evaluation to EP and Council by 31 December 2011 on the EEPR implementation

Specificities of OWE projects

- **BALTIC - KRIEGERS FLAG I, II, III**
 - Coordinated solutions to a joint interconnection of wind farms
 - In territorial waters of neighbouring Member States in the Kriegers Flag area
 - Integrative approach includes cross-border installations
 - Exploitation of HVDC and HVAC technologies

Community contribution: 150 Mio € 1 project



Specificities of OWE projects

● NORTH SEA GRID

- Establishment of market driven connections currently under development or planned to be operational in the short term in the North Sea or Irish Sea providing transmission capacity for the trading of wind electricity between Member States
- Electricity cable projects will be linked to areas with high potential for wind generation

- Cross-border connections aiming at balancing the variability of wind power generated in those areas through an integrative approach of enhanced large scale storage systems

- Integration of innovative systems into projects under development demonstrating adaptability and easy connectivity for the modular establishment of a future European Offshore Grid

Community contribution: 165 Mio € Maximum of 5 projects

Specificities of OWE projects

- **BORKUM WEST II – BARD 1 – NORDSEE OST – GLOBAL TECH I**

Installation and operation of innovative large scale wind energy systems including multi-MW-size wind energy converters, tower and foundation, electrical conversion systems, extensive operation and maintenance concepts, high-performance access systems as well as, the logistics, the management of the wind power plants and their grid integration

Community contribution: 200 Mio € 4 projects
Estimated funding by project: 50 Mio €

Specificities of OWE projects

- **ABERDEEN OFFSHORE WIND FARM**
- **Installation and the testing of innovative multi MW- turbines –from different manufacturers- and a variety of foundation designs**
- **Instrumentation and testing of individual mechanical and electrical components**
- **Issues to address are in particular: (a) logistics and access; (b) operation and maintenance of turbines; (c) environmental impacts; (d) resource studies.**

Community contribution: 40 Mio € 1 project

Specificities of OWE projects

- **THORNTON BANK**

Installation and operation of innovative large scale wind energy systems including multi-MW-size wind energy converters, tower and foundation, electrical conversion systems, extensive operation and maintenance concepts, high-performance access systems as well as, the logistics, the management of the wind power plants and their grid integration.

Community contribution: 10 Mio € 1 project