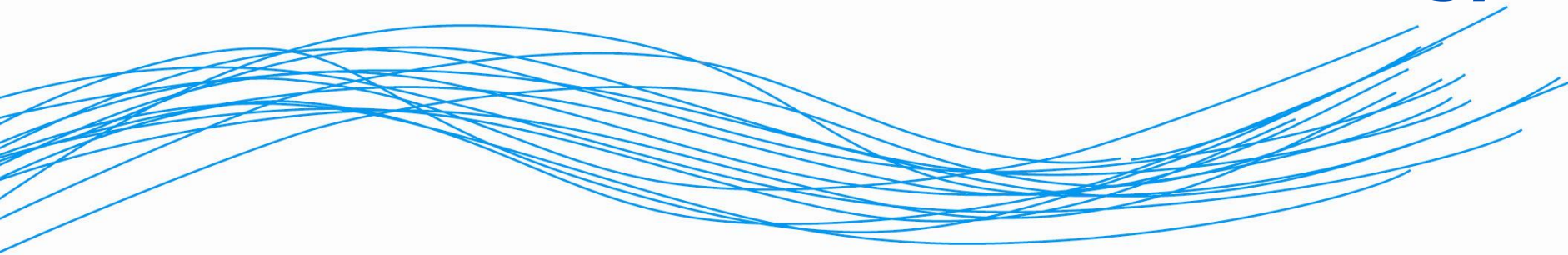
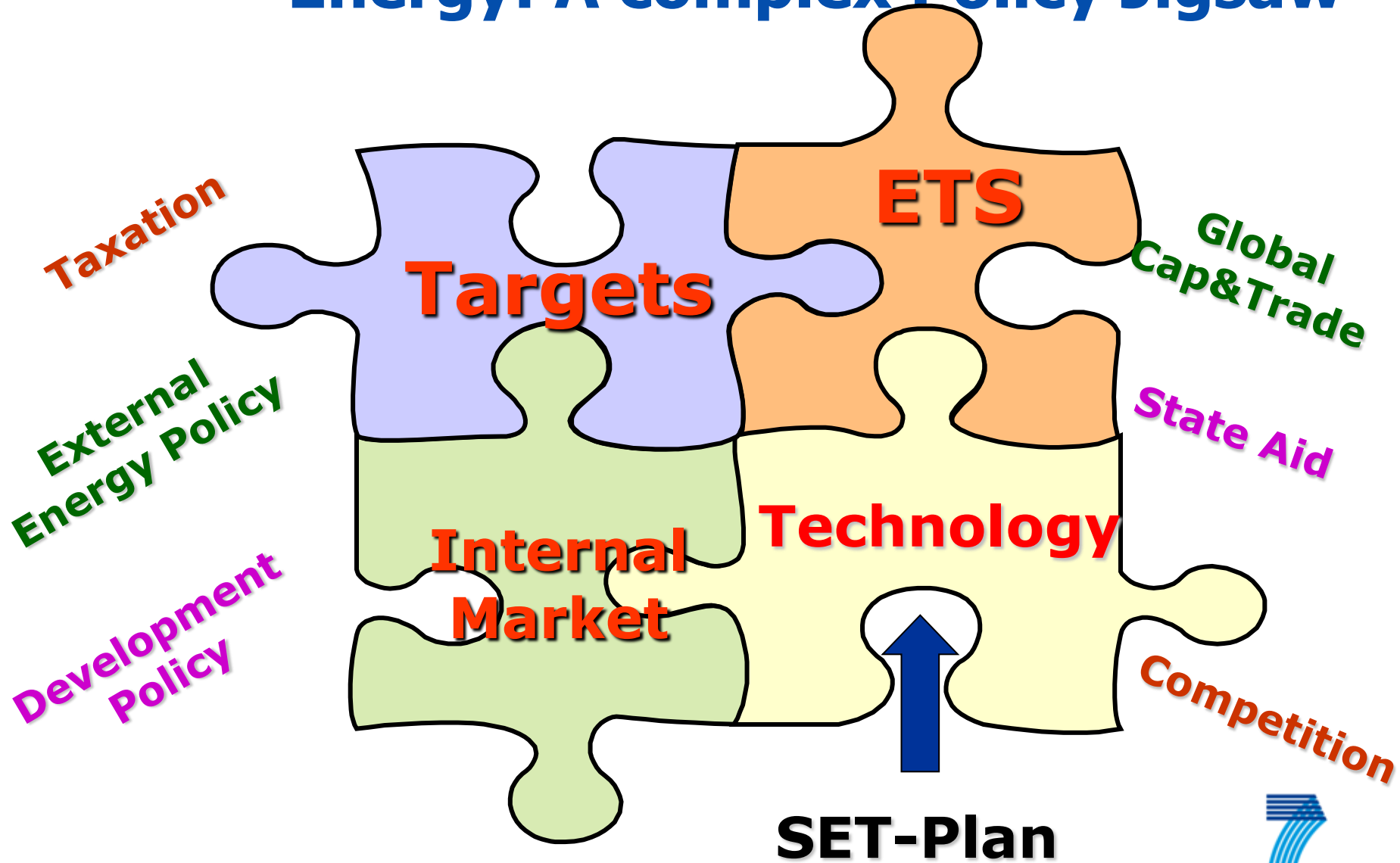


EWEA2011 ORECCA Workshop EU-funded activities Research in Wind Energy



**European Commission
DG Research & Innovation
Thierry Langlois d'Estaintot
Principal Research Programme Officer
New and Renewable Energy Sources**

Energy: A complex Policy Jigsaw



The Strategic Energy Technology (SET) Plan

- **Joint strategic planning / New governance / Information System (SETIS)**
- **Three main pillars for implementation:**
 - ▶ European Industrial Initiatives (EIIs)
 - ▶ European Energy Research Alliance (EERA)
 - ▶ Trans-European Energy Networks and Systems (transition planning)
- **Increase resources, both financial and human**
- **Reinforce international cooperation**

Wind/Marine Renewables

- **Many marine renewable projects already supported in previous FPs, both for wind and ocean energies.**
- **Special effort on Offshore Wind is included in the European Wind Industrial Initiative**
- **EERA - Wind is already operational**
- **EERA – Ocean is being considered**
- **One FP6 (UPWIND) and eight FP7 wind projects (DG RTD) are presented here after**
- **Ocean energy projects (CORES, EQUIMAR) are also funded under FP7**
- **DG ENER also supports several wind & ocean projects**

Workshop EWEA2011 - Wed. 16th 9:00 - 13:00

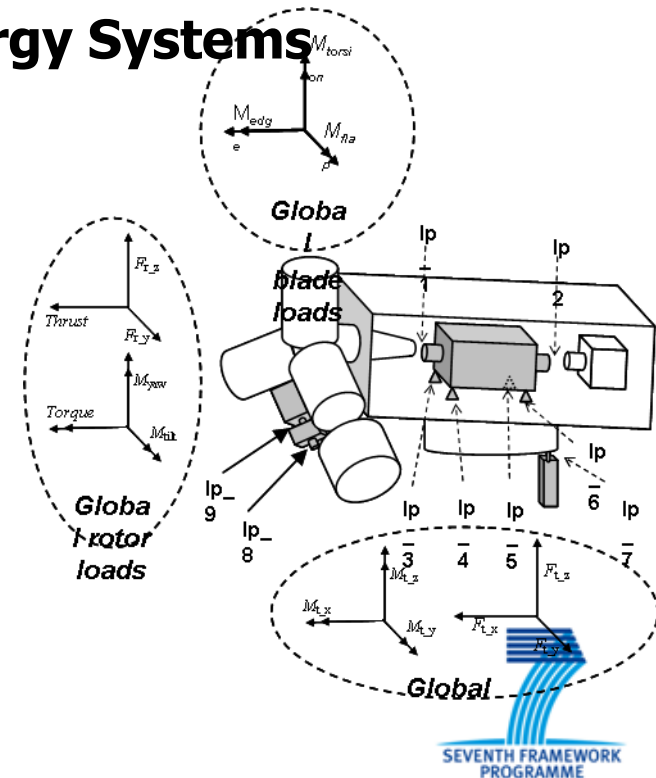
UPWIND

- **Integrated Wind Turbine Design**
- **Coordinator : DTU/RISOE (DK)**
- **Towards the large wind turbines of tomorrow**
- FP6 Integrated Project.
- Contract number: 019945
- 60 months – March 2006 to February 2011 (Finished)
- 45 partners from 14 different countries
- Total budget: 22,618,628 €
- Max. EC contribution: 14,566,628 €
- Website: www.upwind.eu



PROTEST

- **PROcedures for TESTING and measuring wind energy systems**
- **Coordinator : ECN (NL)**
- **Pre-Standardisation R&D for Wind Energy Systems**
- Collaborative Project.
- Grant agreement number: 212825
- 30 months – March 2008 to August 2010 (Finished)
- 7 partners from 4 different countries
- Total budget: 2,675,619 €
- Max. EC contribution: 1,980,119€
- Website: www.ecn.nl/nl/units/wind/rd-programma/operations-maintenance/diagnostics-condition-based-maintenance/protest/



Side event EWEA2011 - Tu. 15th - 14:00 - 18:00

RELIAWIND

- **Reliability focused research on optimizing Wind Energy systems design, operation and maintenance: Tools, proof of concepts, guidelines & methodologies for a new generation.**
- **Coordinator : GAMESA (Spain)**
 - ▶ **Design for Reliability of Wind Turbines**
 - ▶ Collaborative Project.
 - ▶ Grant agreement number: 212966
 - ▶ 36 months – March 2008 to March 2011 (Finished)
 - ▶ 10 partners from 7 different countries
 - ▶ Total budget: 7,766,181 €
 - ▶ Max. EC contribution: 5,180,767 €
 - ▶ Website: www.reliawind.eu



SAFEWIND

- **Multi-scale data assimilation, advanced wind modelling and forecasting with emphasis to extreme weather situations for a safe large-scale wind power integration**
- **Coordinator : ARMINES (FR)**
 - ▶ **Wind Forecasting – Extreme conditions**
 - ▶ Collaborative Project.
 - ▶ Grant agreement number: 213740
 - ▶ 48 months – Sept 2008 to Aug 2012
 - ▶ 20 partners from 6 different countries
 - ▶ Total budget: 5,581,859 €
 - ▶ Max. EC contribution: 3,992,400 €
 - ▶ Website: www.safewind.eu



MARINA Platform

- **Multipurpose floating platform**
- **Potential combination wind-ocean energy**
- **Coordinator : Acciona Energia S.A.**
 - ▶ **MArine Renewable INtegrated Application Platform**
 - ▶ Collaborative Project
 - ▶ Grant agreement number: 241402
 - ▶ 54 months – January 2010 to June 2014
 - ▶ 17 partners from 12 different countries
 - ▶ Total budget: 12.761.220€
 - ▶ Max. EC contribution: 8.708.660€
 - ▶ Website: www.marina-platform.info



Workshop EWEA2011 - Wed. 16th - 11:00 - 12:30

ORECCA

- **Coordinated Action**
- **Knowledge sharing on offshore renewable energy conversion platforms**
- **Coordinator : Fraunhofer - IWES**
 - ▶ **Off-shore Renewable Energy Conversion platforms**
 - ▶ Grant agreement number: 241421
 - ▶ 18 months – March 2010 to August 2011
 - ▶ 28 partners from 11 different countries
 - ▶ Total budget: 1,797,870 €
 - ▶ Max. EC contribution: 1,599,032 €
 - ▶ Website: www.orecca.eu

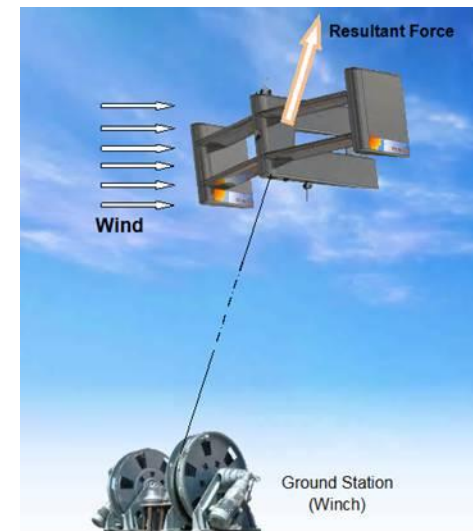


DEEPWIND

- **FET- Collaborative**
- **Future Deep Sea Wind Turbine Technologies**
- **Coordinator : DTU-RISOE (DK)**
 - ▶ **Vertical Axis Floating Wind Turbine**
 - ▶ Grant agreement number: 256769
 - ▶ 48 months – October 2010 to September 2014
 - ▶ 12 partners from 6 different countries
 - ▶ Total budget: 4,178,234 €
 - ▶ Max. EC contribution: 2,992,438 €
 - ▶ Website: www.deepwind.eu

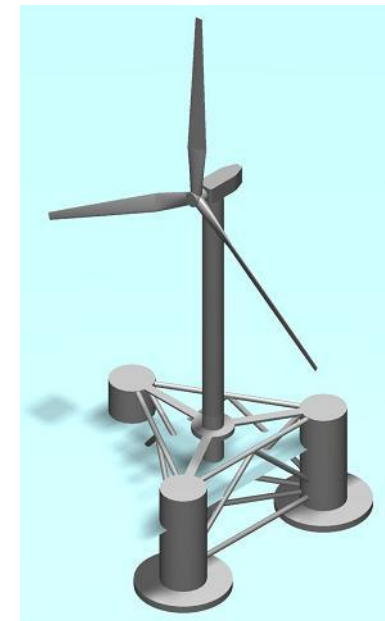


- **FET- Collaborative**
- **High Altitude Wind Energy**
- **Coordinator : OMNIDEA (PT)**
 - ▶ **High Altitude Wind Energy conversion**
 - ▶ Grant agreement number: 256714
 - ▶ 42 months – October 2010 to March 2014
 - ▶ 7 partners from 5 different countries
 - ▶ Total budget: 2,996,894 €
 - ▶ Max. EC contribution: 1,920,470 €
 - ▶ Website: <http://www.omnidea.net/hawe>



HiPRwind

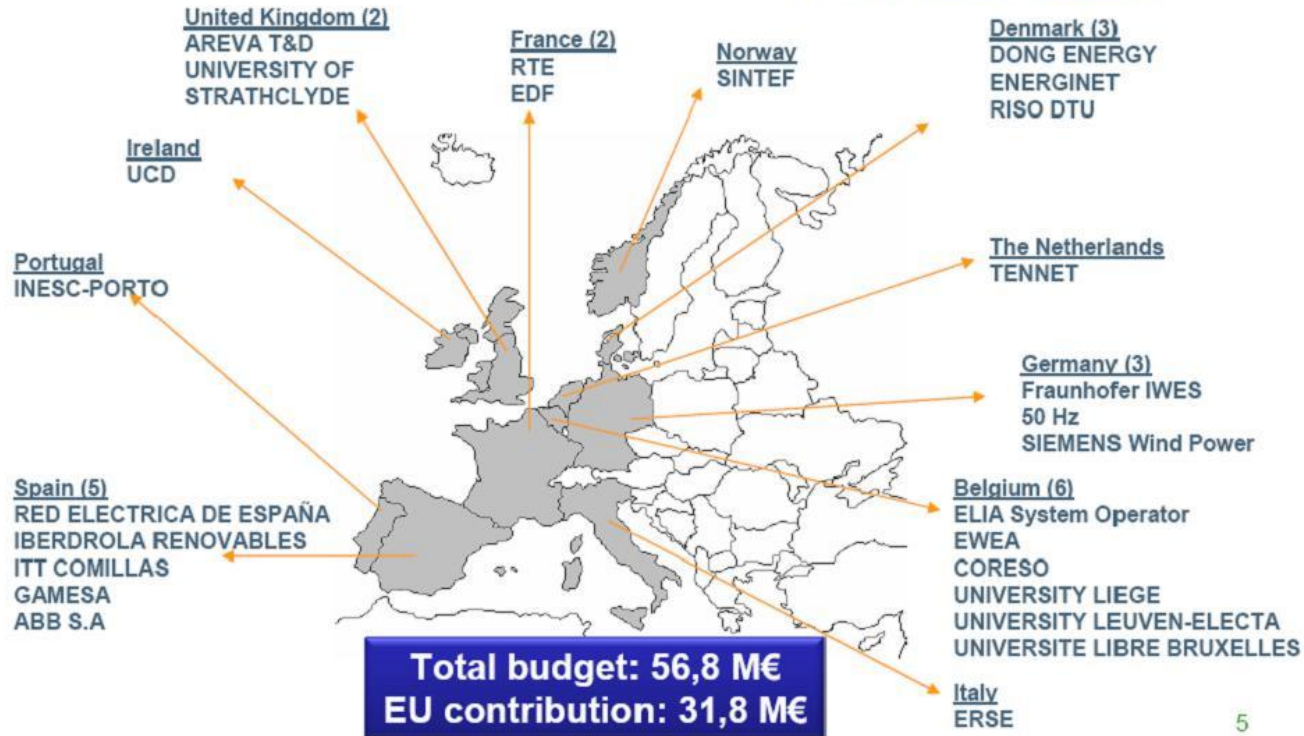
- **Large-Scale Collaborative**
- **High Power, high Reliability offshore wind technology**
- **Coordinator : FhG-IWES (DE)**
 - ▶ **Floating wind energy system**
 - ▶ Grant agreement number: 256812
 - ▶ 60 months – November 2010 to October 2015
 - ▶ 19 partners from 9 different countries
 - ▶ Total budget: 19,831,585 €
 - ▶ Max. EC contribution: 11,021,621 €
 - ▶ Website: www.hiprwind.eu



Single Project : «Twenties» (FP7)

Consortium and budget

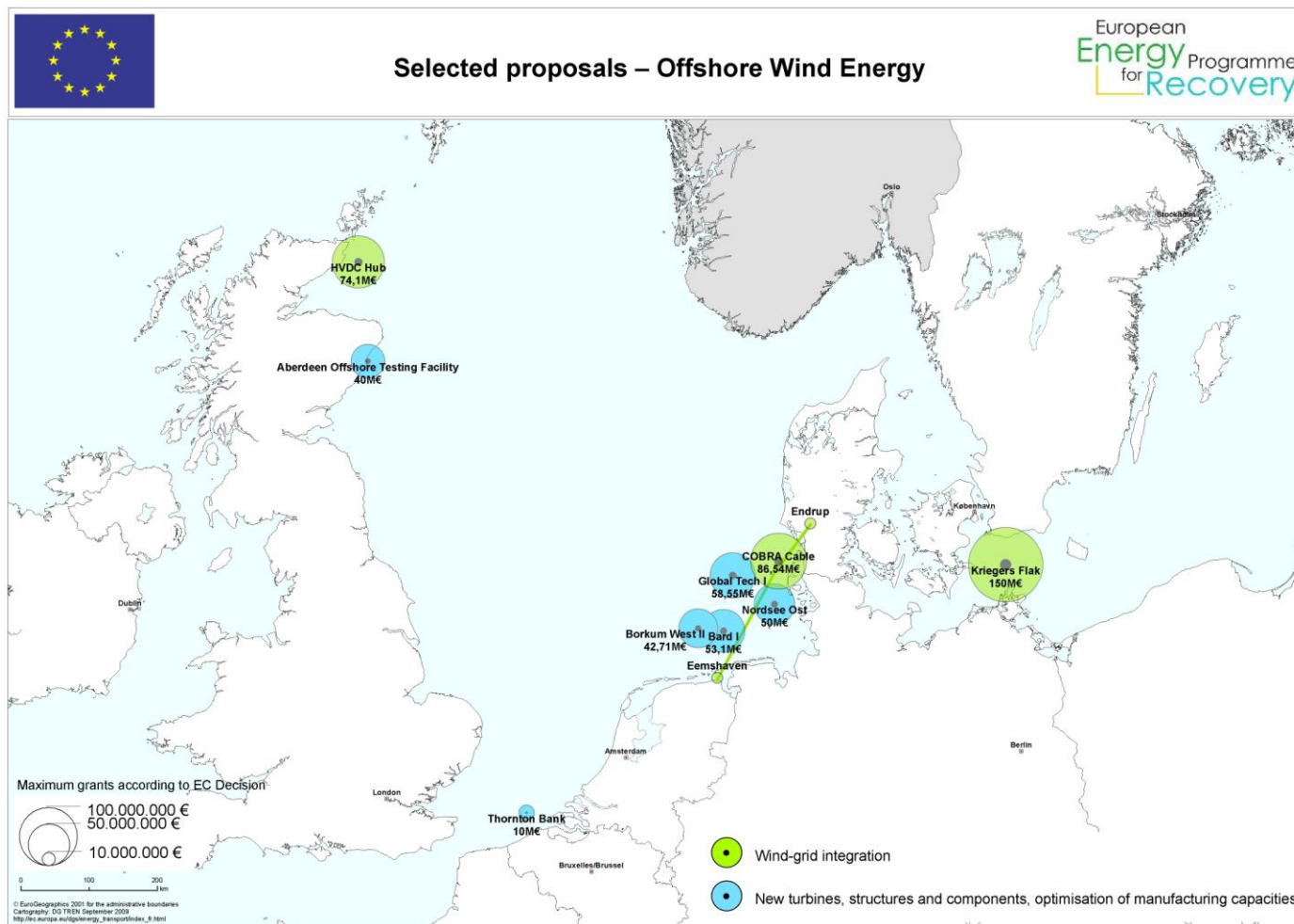
- ✓ 10 European Member States
- ✓ 1 Associated Country



5

Recovery Plan Offshore Wind Energy: (2009-2010)

- **Grid integration of offshore wind energy (315 M €)**
 - **New turbines, structures, components, optimisation of manufacturing (250 M €)**
- TOTAL: 565 M€**



Bard Project



ENERGY - 2011

- **Topic 2.3.2: Design tools for Offshore Wind farm clusters (ENERGY-2011-1)**
- Spatial modelling
- Interconnection Optimisation
- Energy yield prediction
 - ▶ **Collaborative Project**
 - ▶ **Max EU contribution: EUR 5 000 000**
 - ▶ **Up to two projects may be funded.**

ENERGY - 2011

- **Topic 2.3.1: Demonstration of innovative off-shore wind electricity generation structures (ENERGY-2011-2)**
- Innovative floating structures (deep water)
- Integration of Multi-MW wind energy converters
- Access, safety, logistics, operation and maintenance, ...
 - ▶ **Collaborative Project with predominant demonstration**
 - ▶ **Up to two projects may be funded.**

OCEAN - 2011

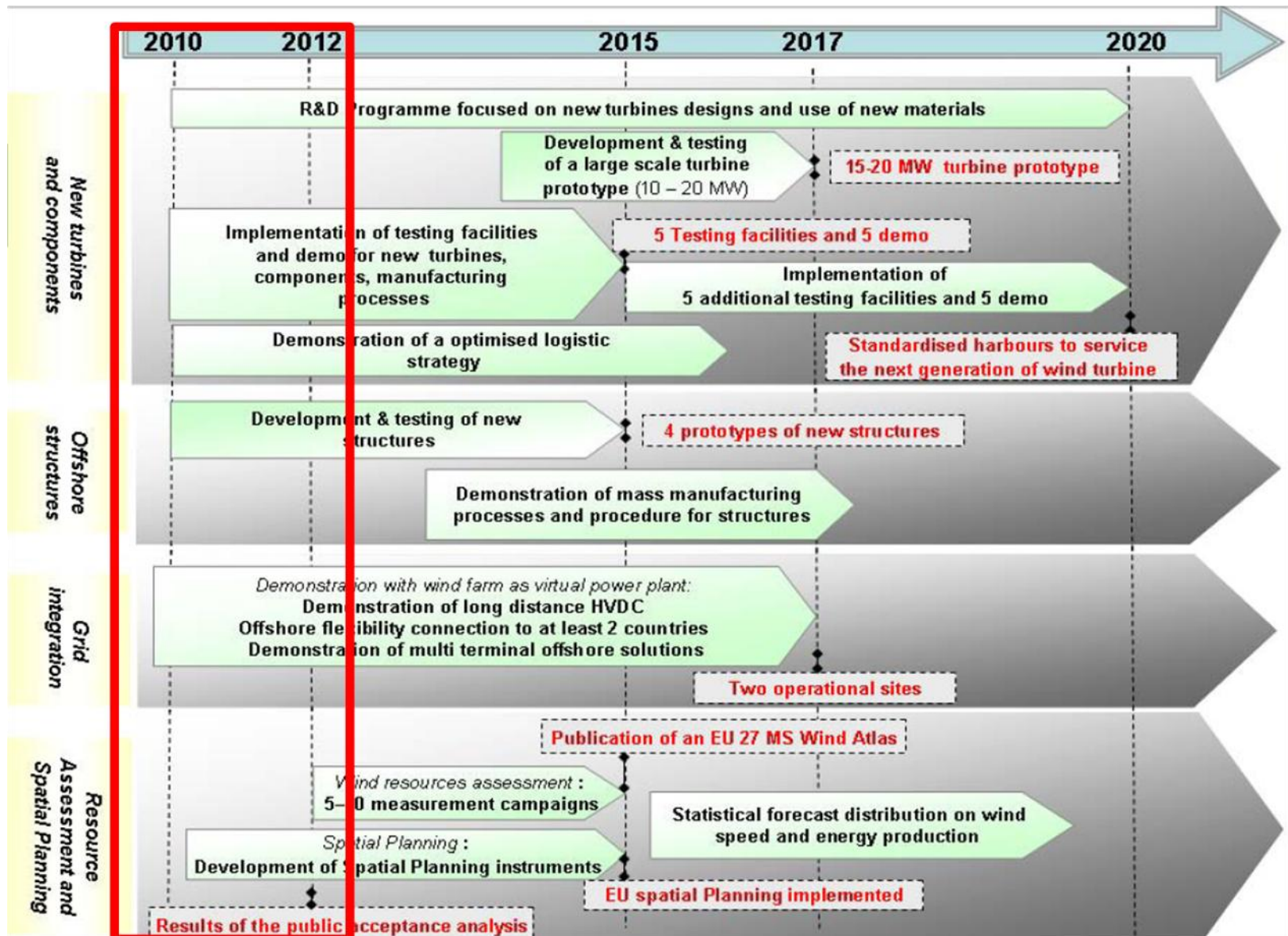
- **Topic 1: Multi-use Offshore Platforms**
- Combination wind-ocean energy with Transport & Aquaculture
 - ▶ **Collaborative Project**
 - ▶ **Max EU contribution: EUR 14 000 000 (EUR 4 000 000 from Energy)**
 - ▶ **Up to three projects may be funded**

OCEAN - 2011

Topic 4: « Knowledge-base... with assessment of wind energy potential in the Mediterranean and the Black Sea »

- ▶ **SICA Collaborative Project**
- ▶ **Max EU contribution: EUR 9 000 000 (EUR 1 000 000 from Energy)**
- ▶ **Up to one project may be funded.**

Technology Roadmap Wind



Energy – Staying informed

Energy Research web site and Energy Helpdesk

http://ec.europa.eu/research/energy/index_en.cfm

rtd-energy@ec.europa.eu

Energy Policy

http://ec.europa.eu/comm/energy/index_en.html

Seventh Framework Programme

<http://cordis.europa.eu/fp7/>

Calls for proposals

<http://cordis.europa.eu/fp7/dc/index.cfm>

