



Directorate-General
for Energy



European Wind Initiative

Implementation and next steps

TP Wind - Funding Wind Energy R&D in Europe

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● European Energy Strategy

● Key priorities are working in tandem:

» EU 2020 Strategy

» EU Energy Strategy 2011-2020

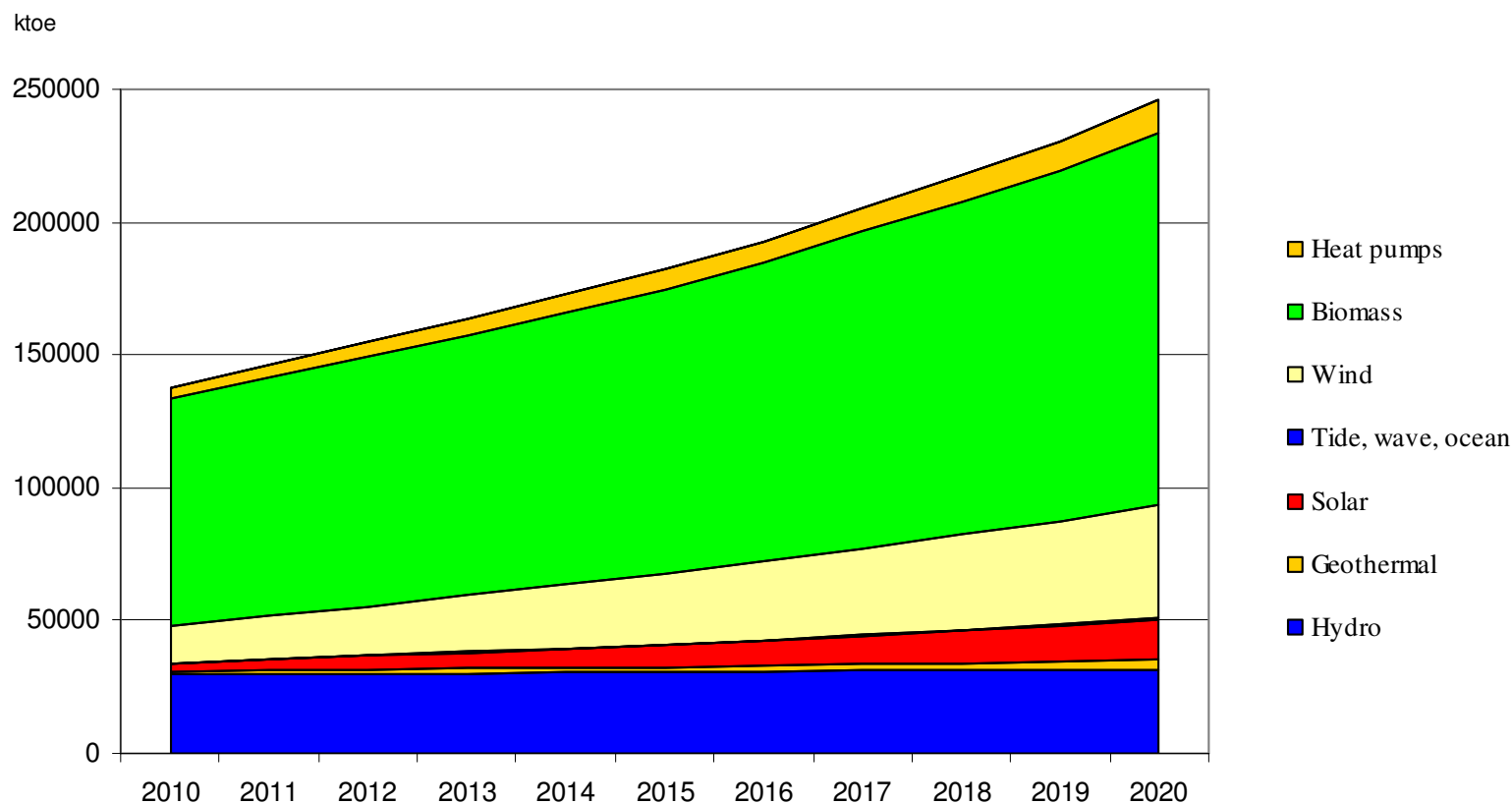
- Strategic Energy Technology Plan
- Resource efficiency – Renewables 20%
- Competitive single market
- European infrastructure
- Energy Efficiency Plan, March 2011

- **Conclusions European Council 4.2.11:
SET Plan**

*“The EU and its Member States will promote investment in renewables and safe and sustainable low carbon technologies and **focus on implementing the technology priorities established in the European Strategic Energy Technology plan.**”*

● Implementing technology – Member States view

Technology Results from the National Renewable Energy Action Plans



Progress towards targets according to statistics

2011		AT	BE	BU	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE	IT
Electricity	recent growth	😊	😐	😊	😐	😊	😐	😐	😐	😐	😊	😐	😊	😊	😞
	progress made	😞	😊	😐	😞	😐	😊	😞	😞	😞	😊	😞	😊	😊	😞
transport	recent growth	😊	😐	😞	😊	😞	😞	😞	😊	😊	😞	😞	😊	😐	😊
	progress made	😊	😞	😞	😐	😞	😞	😞	😐	😊	😊	😞	😊	😞	😐
		LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK	
Electricity	recent growth	😞	😊	😞	😞	😞	😊	😊	😐	😊	😊	😊	😊	😐	
	progress made	😞	😐	😞	😞	😊	😐	😐	😞	😞	😞	😐	😊	😞	
transport	recent growth	😐	😐	😐	😞	😞	😊	😐	😊	😊	😐	😐	😐	😊	
	progress made	😞	😊	😐	😞	😐	😊	😐	😐	😊	😞	😞	😊	😐	

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progress made towards the 2010 targets: 😞 0-33%   😐 34-66%   😊 67-100%;

● Wind technology is on track



- It covers the 2010 - 2020 period
- It clarifies the development trajectory of wind power up to 2020 and identifies its main R&D priorities and challenges



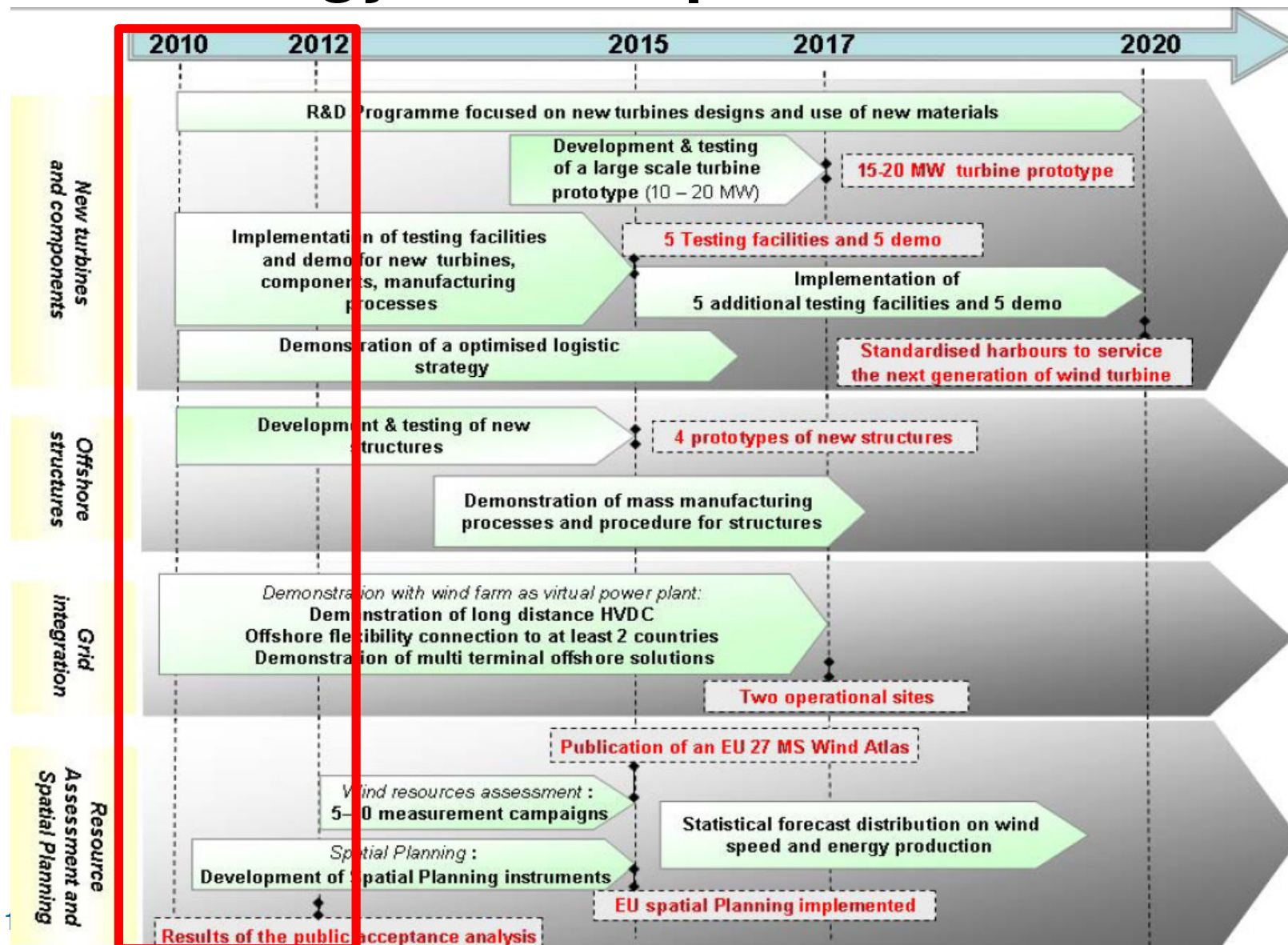
- It covers the 2010 - 2012 period
- It provides a detailed description of the actions to be launched in the first 3 years, including their budgets. However, it is not designed to be put immediately into action by funding authorities



- It focuses on 2011 only
- It provides a detailed list of EU and national calls for proposals and budget allocations that can be easily implemented by relevant authorities
- It is an operational document, rather than a strategic one like the EWI or its 2010 - 2012 Implementation Plan

Source: TP Wind

Technology Roadmap Wind

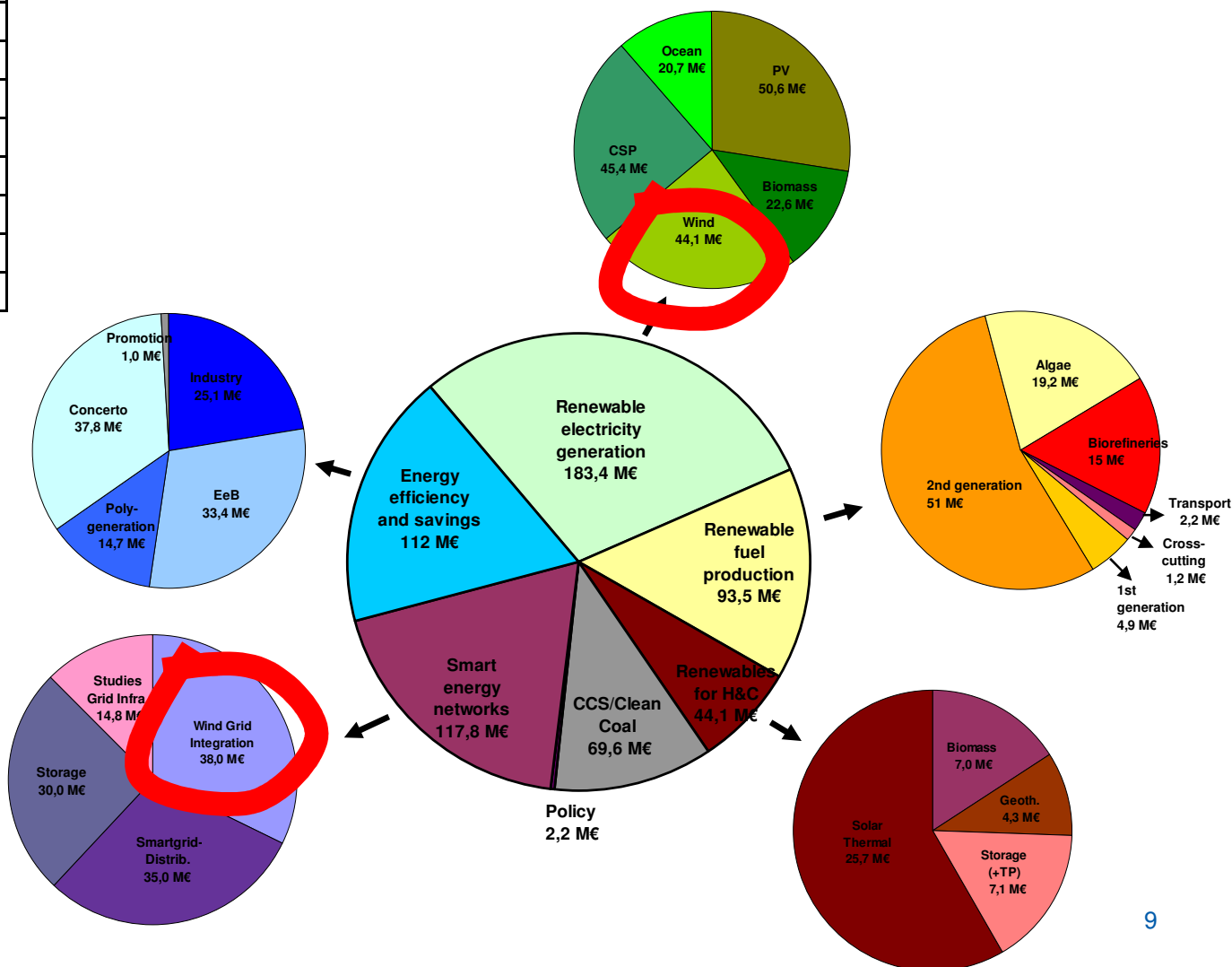


Activity	Topics	EC: FP , IEE, EIB	MS	Industry
New turbines	Large scale turbines and innovative design for reliable turbines (10 – 20 MW) – focus on new materials	10 million (FP7)		40 million
	Improved reliability of large turbines and wind farms	10 million (FP7)	10 million	16,1 million
	Turbine optimisation and demonstration for extreme climates and complex terrains		5 million	5 million
	Definition of methods and standards for testing large wind turbine components	5 million (FP7)		5 million
	Labs and Field testing facilities for 10 – 20 MW turbines aimed at increasing reliability	75 million (loans and equity – EIB)	25 million	100 million
	Large scale manufacturing and logistics		20 million	75 million
Offshore	Deep offshore			9,7 million
	Mass-manufacturing of substructures			47 million
	Standardisation technology transfer from oil & gas sector	3.34 million (FP7)		
Grid	grid connection technologies for offshore wind farms	10 million (FP7)		
	Controllable HVDC multi-terminal offshore and onshore solutions		10 million	20 million
Resources assessment	identification of measurement techniques and sites	5 million (FP7)	5 million	6 million
	integration of relevant EU projects on spatial planning	2 million (IEE)	2 million	5 million
	economic and societal value of wind power	1 million (IEE)		0.5 million
Total		FP7: 43.34 million IEE: 3 million EIB: 75 million (loans and equity)	77 million	329,3 million 8

● EU Funding (M€) - FP7 (Calls 2007 - 2011)

FP7 CALLS	BUDGET (M€)
CALL 2007-ENERGY	88,2
CALL 2008-ENERGY	142,4
CALL 2009-ENERGY	84,9
CALL 2009-BIOREFINERIES	15,0
CALL 2010-ENERGY	126,4
CALL 2010-EeB	13,4
CALL 2011-ENERGY	137,0
CALL 2011-EeB	20,0

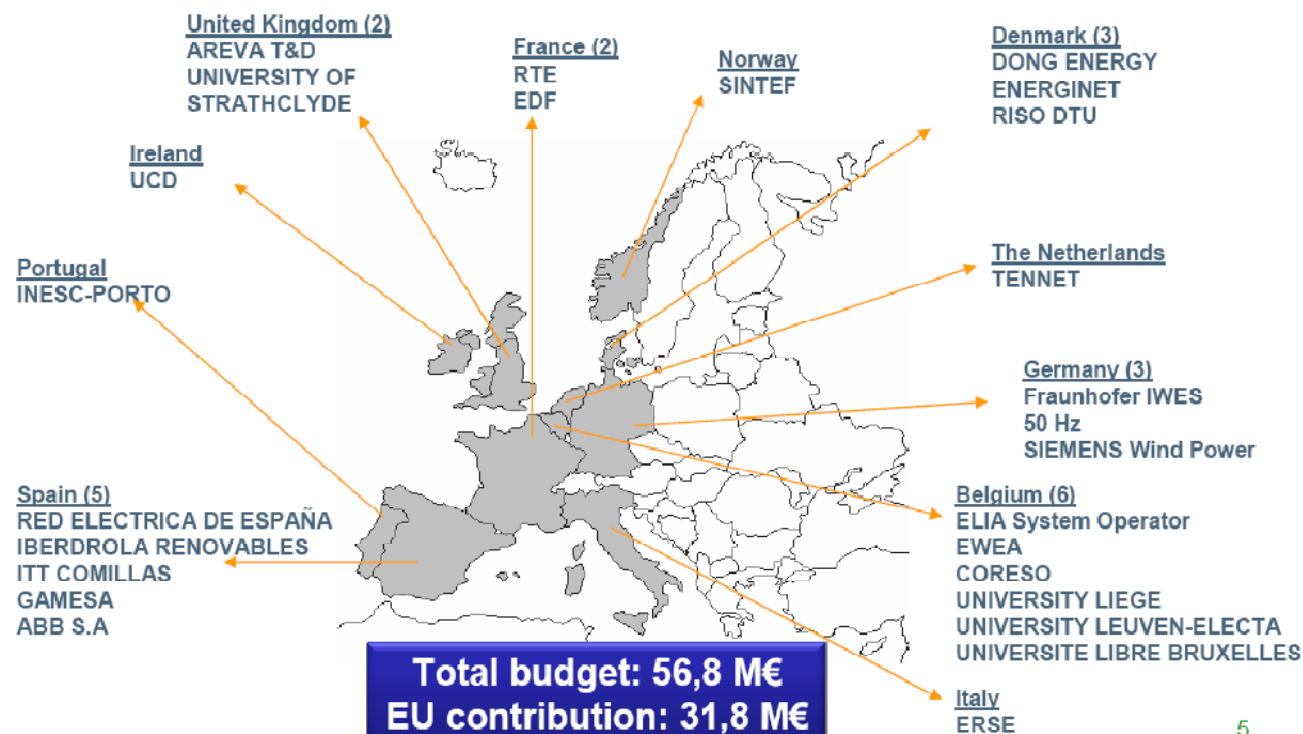
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● Single Project : «'Twenties » (FP7)

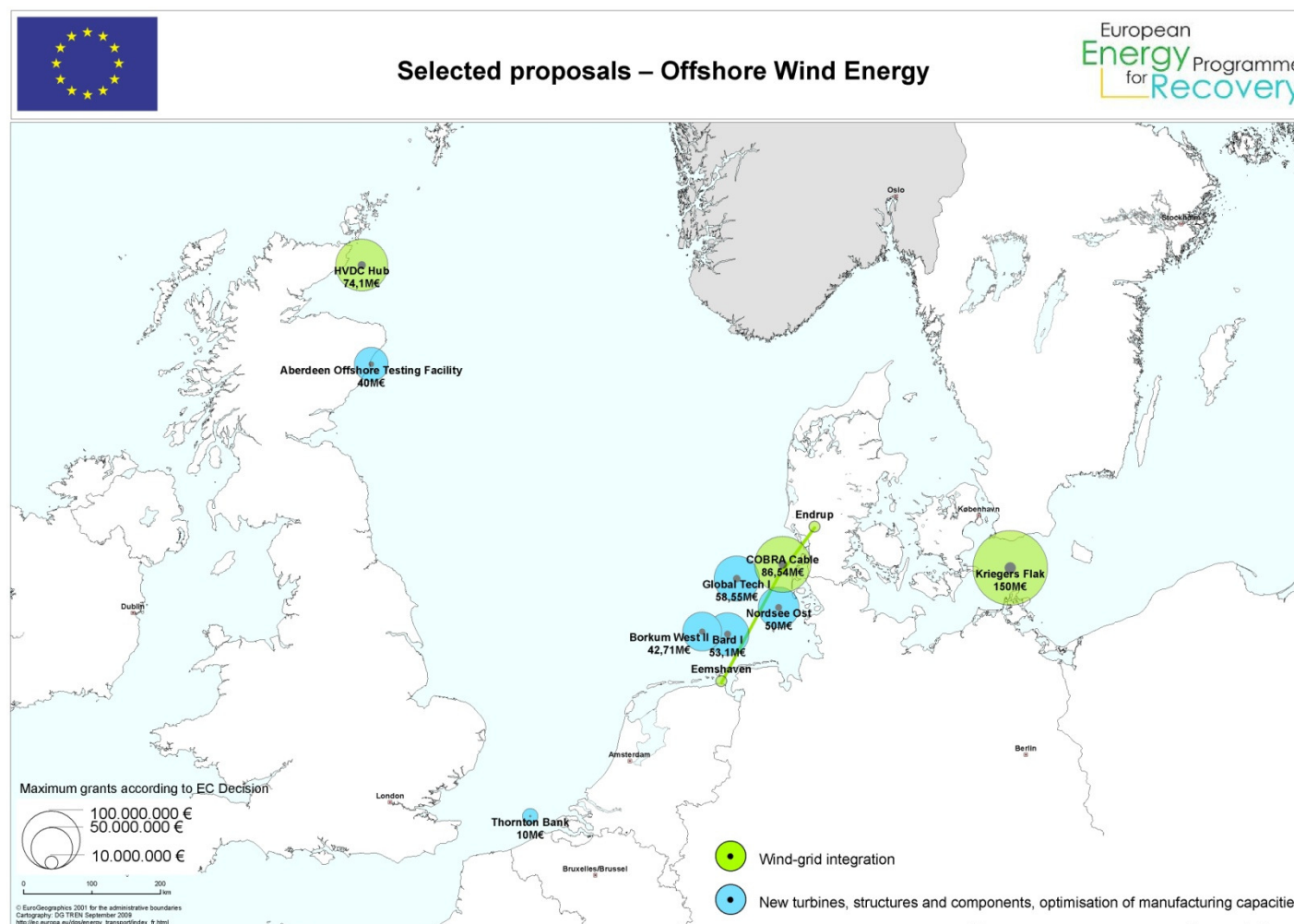
Consortium and budget

- ✓ 10 European Member States
- ✓ 1 Associated Country



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



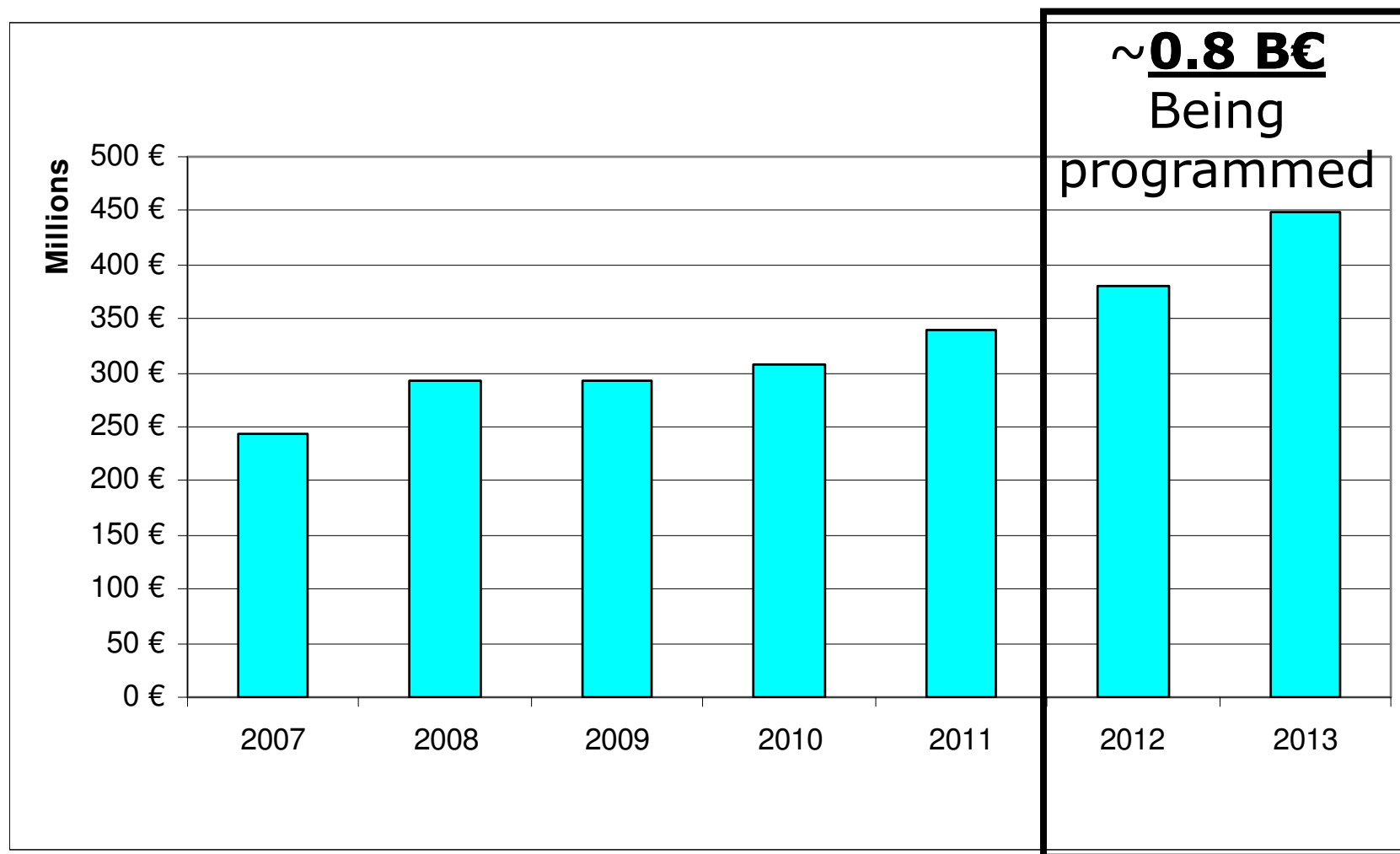
● **Way forward – lines of actions**

- EC – finances high risk research, demonstration and innovative projects with clear EU impact
- Cooperation with the Member States issues
  - » Challenges in additionality of national programmes
  - » Reluctance from the MS to adapt their own rules to a common frame

● **Next steps – EC financing instruments**

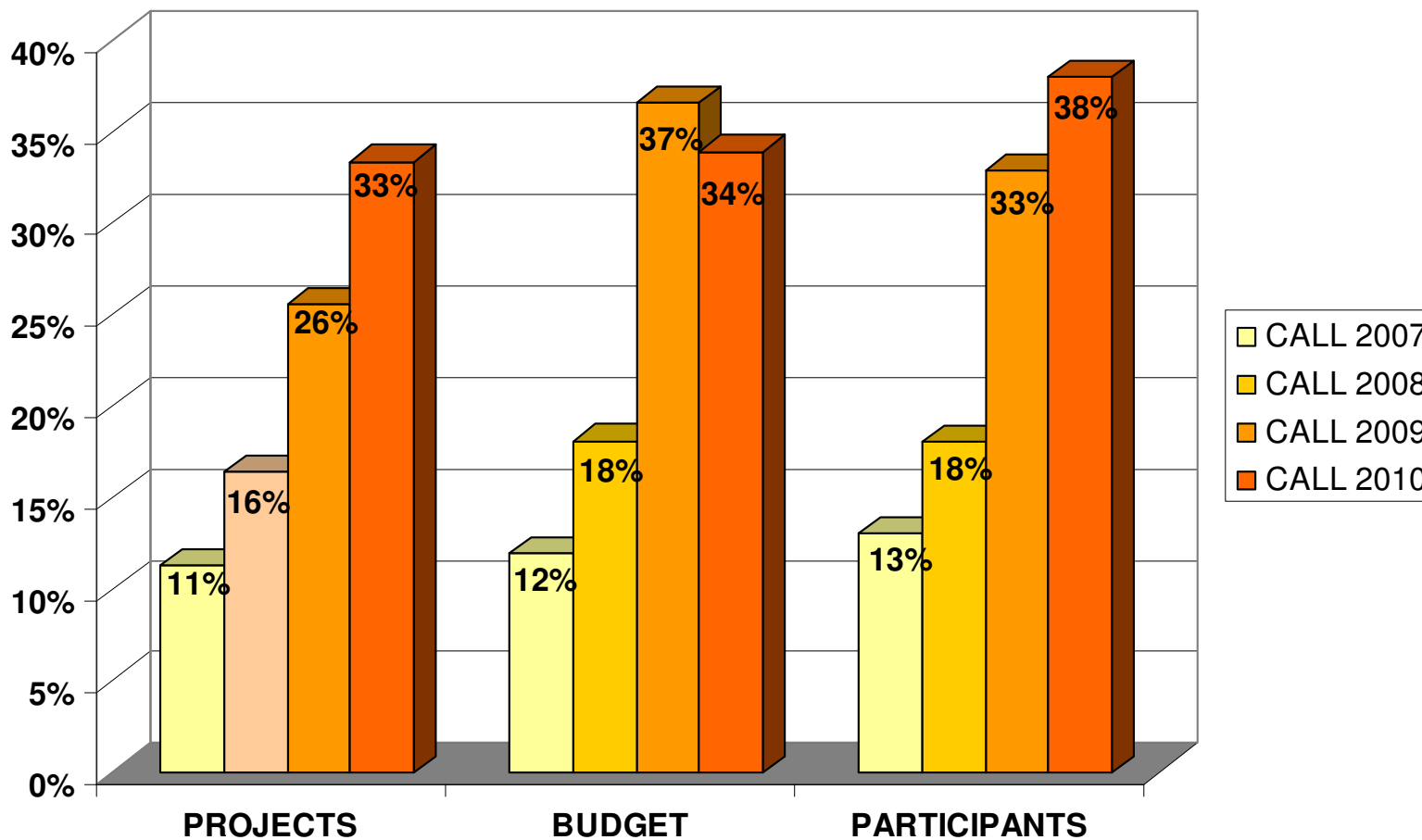
- FP7 2012-2013: programming
- Research and Innovation Programmes 2014 – 2020
  - » from research and demonstration
    - grants for R&D
  - » to innovation and market
    - Loans Platform (RSFF)
    - Equity Platform (EGIF)
- Regional policy

● FP7 ENERGY budget

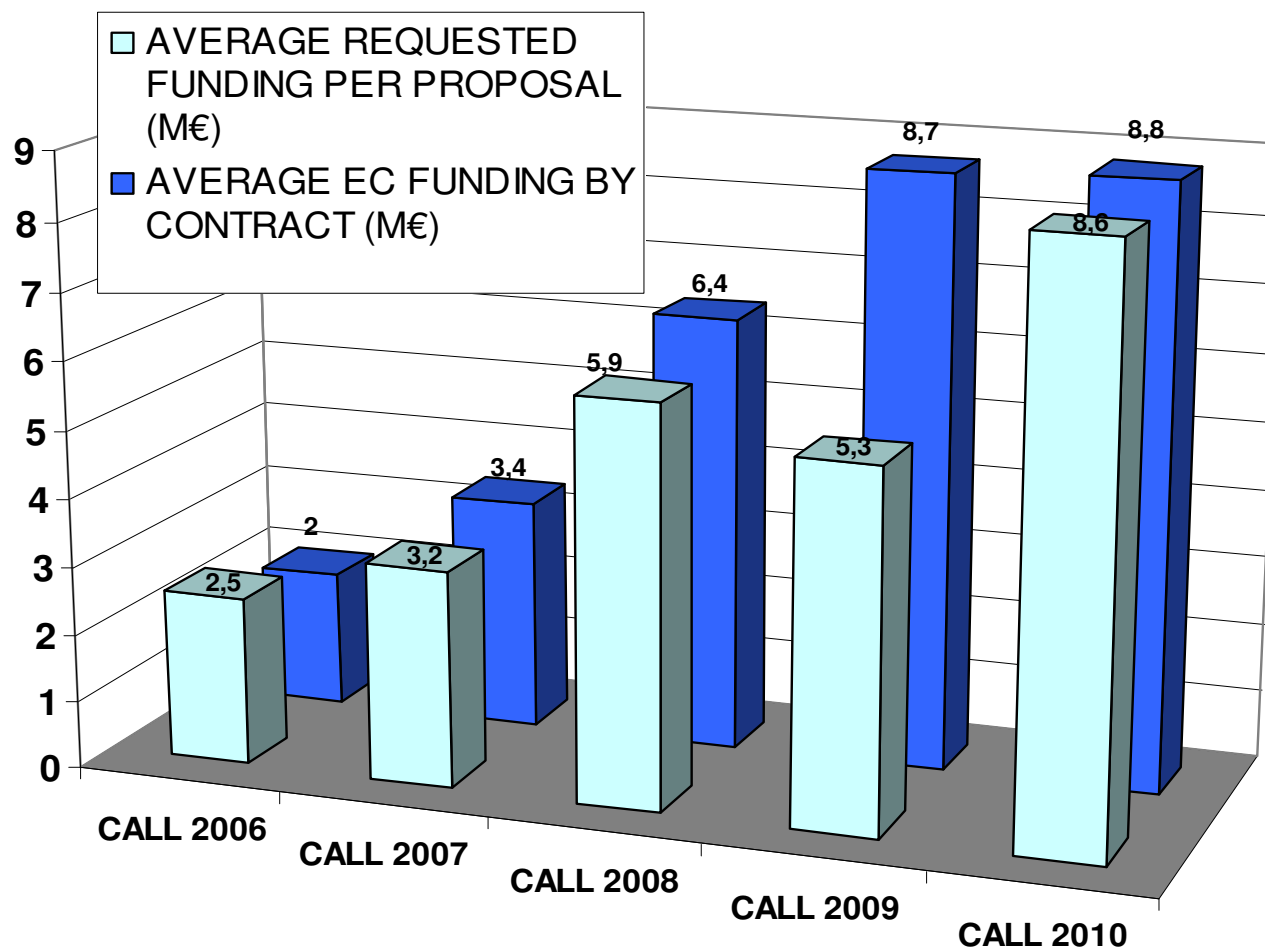




GENERATING INDUSTRY INTEREST: TOWARDS ACCEPTABLE SUCCESS RATES



LARGER PROPOSALS - MORE FUNDING PER PROPOSAL



● Actions 2011 - 2012

- Implementation Plan reflected in 2011/2012 FP7 topics
  - » Demonstration of innovative off-shore wind electricity generation structure
  - » Large scale turbines and innovative design for reliable turbines (10 – 20 MW) – *research 15 million€*
  - » Improved reliability of offshore large turbines and wind farms (2-5 MW) – *demo 10 million€*
- Cooperation with Member States
  - » Mapping the ongoing projects –with SETIS
  - » Possibly on ERANET Plus – European Wind Atlas
- Industrial participation and common strategy for research

● Conclusion

- Successful R&D&D projects bringing to the global market European competitive low carbon technologies
- Wind to continue being a leading global player
  - » EC commitment to Wind Roadmap
  - » Strong commitment of industry
  - » *Now is the time to think and develop jointly suitable financial mechanisms for 'FP8'*
  - » Challenges
    - Member States integration
    - Next financial perspective

Thank you
for your
attention!

