

Supporting Wind Power – EC perspective



Norela Constantinescu
European Commission , DG ENERGY

5 February 2013
EWEA Congress, Vienna

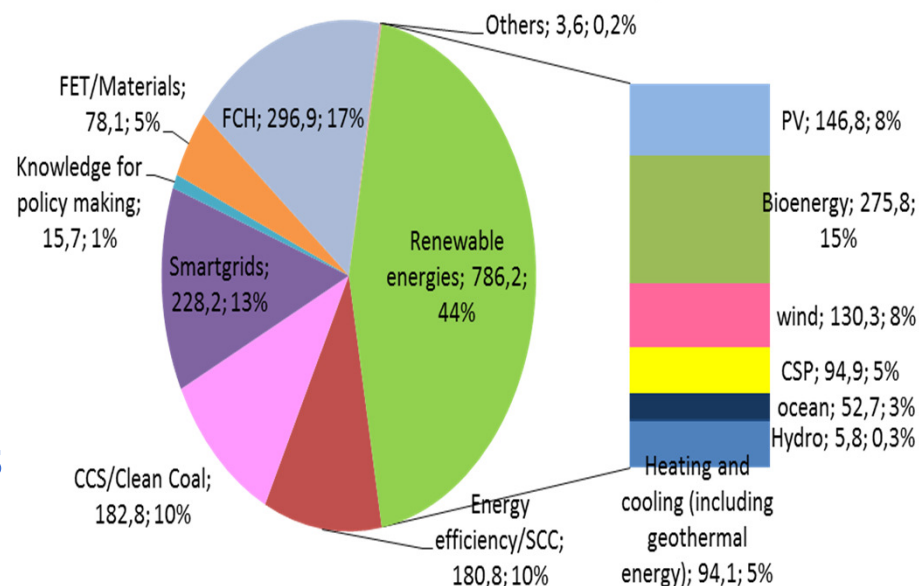
SET Plan –industrial perspective and sectors

*Focus on technologies
with market impact up
to 2020*

- Wind
- Solar
- Electricity grids
- CCS
- Bioenergy
- Nuclear
- Smart Cities and Communities
- Fuel cells and hydrogen

*Industrial applications
Financing*

EU contribution per activity (FP7 Energy, 2007-2012; Mio €; share of total)





EU financing for wind R&D and innovation (2007-2013)

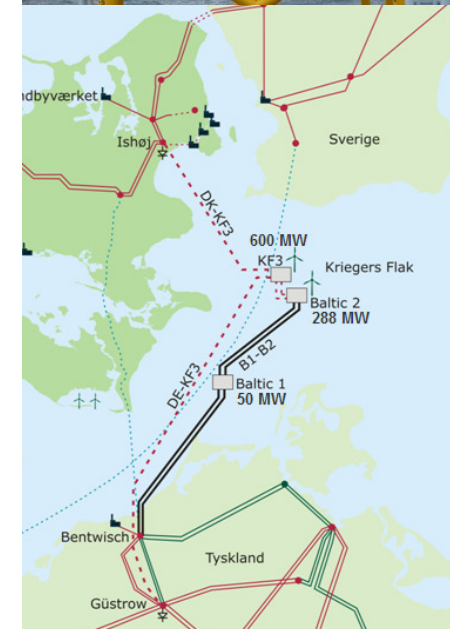
FP7 ~ € 200 million (2007-2013)

EEPR ~ € 565 million (offshore wind in 2008)

NER300 ~ € 273 million (award decisions 2012)

CIP - IEE ~ € 10 million (2007-2013)

WIND: ~ € 1.1 billion (2007-2013)





European
Commission

European Economic Programme Recovery

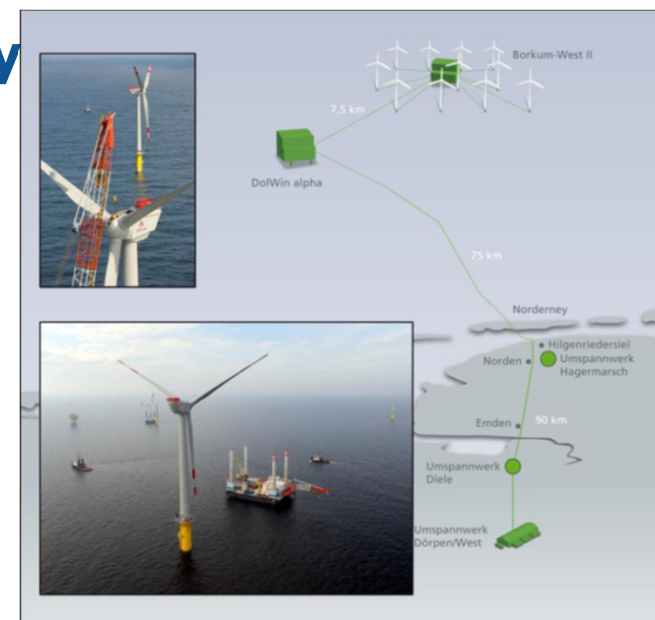
New turbines, structures and components: 254 million EUR

- DE : Bard I, Gravity Foundations, Nordsee Ost, Borkum West II
- BE : Thornton Bank
- UK : Aberdeen

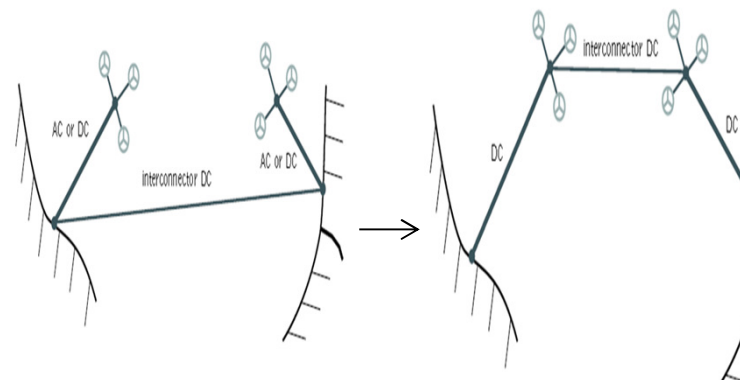
Offshore Wind-Grid Integration : 311 million EUR

Projects addressing priorities for :

- Energy Infrastructure Package
- North Sea Countries Offshore Grid Initiative

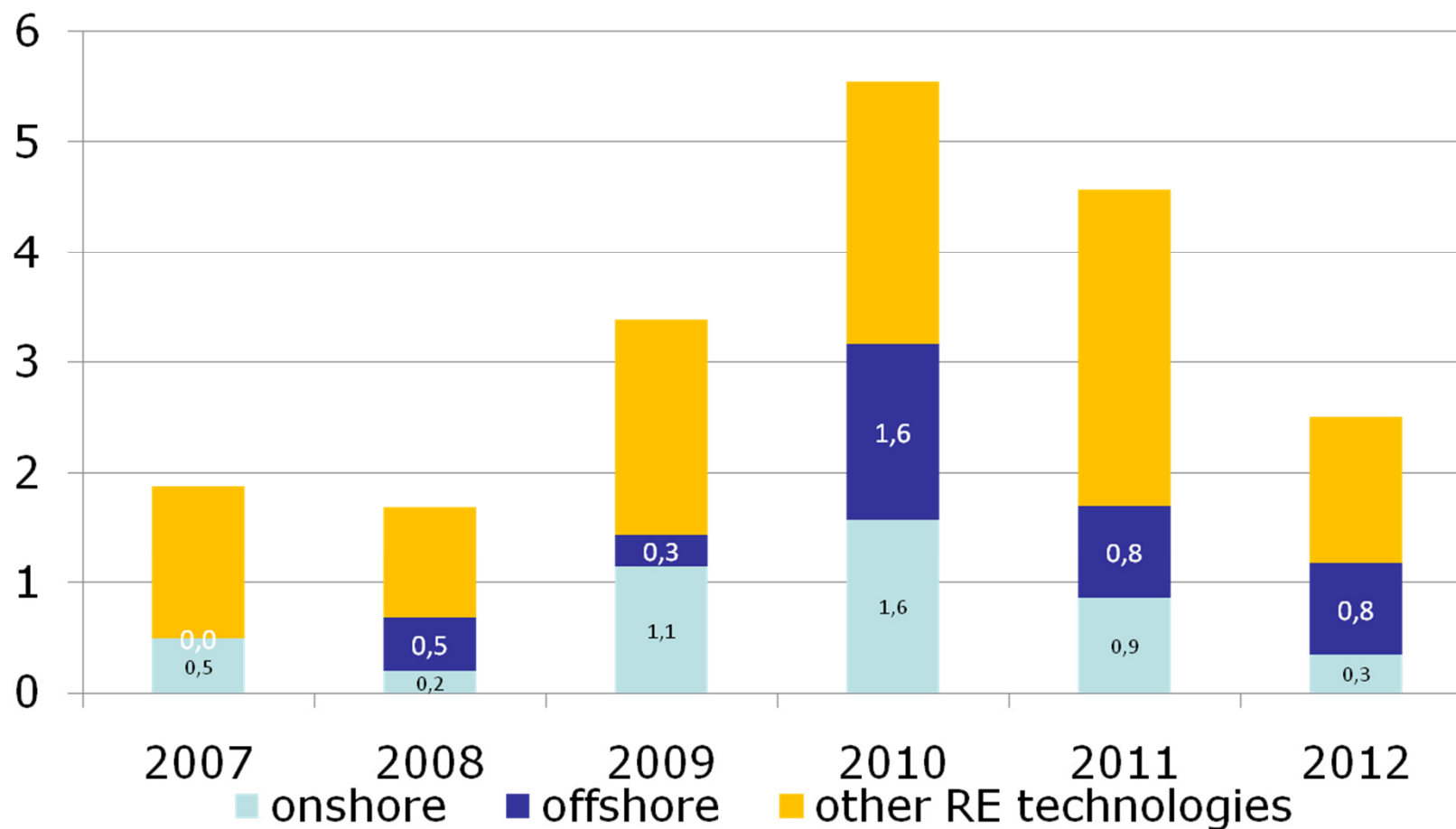


DE – DK : Kriegers Flak



European Investment Bank

8.9 bn EUR (2007-2012)



EIB Total lending volume wind sector (2007-2012) – courtesy EIB

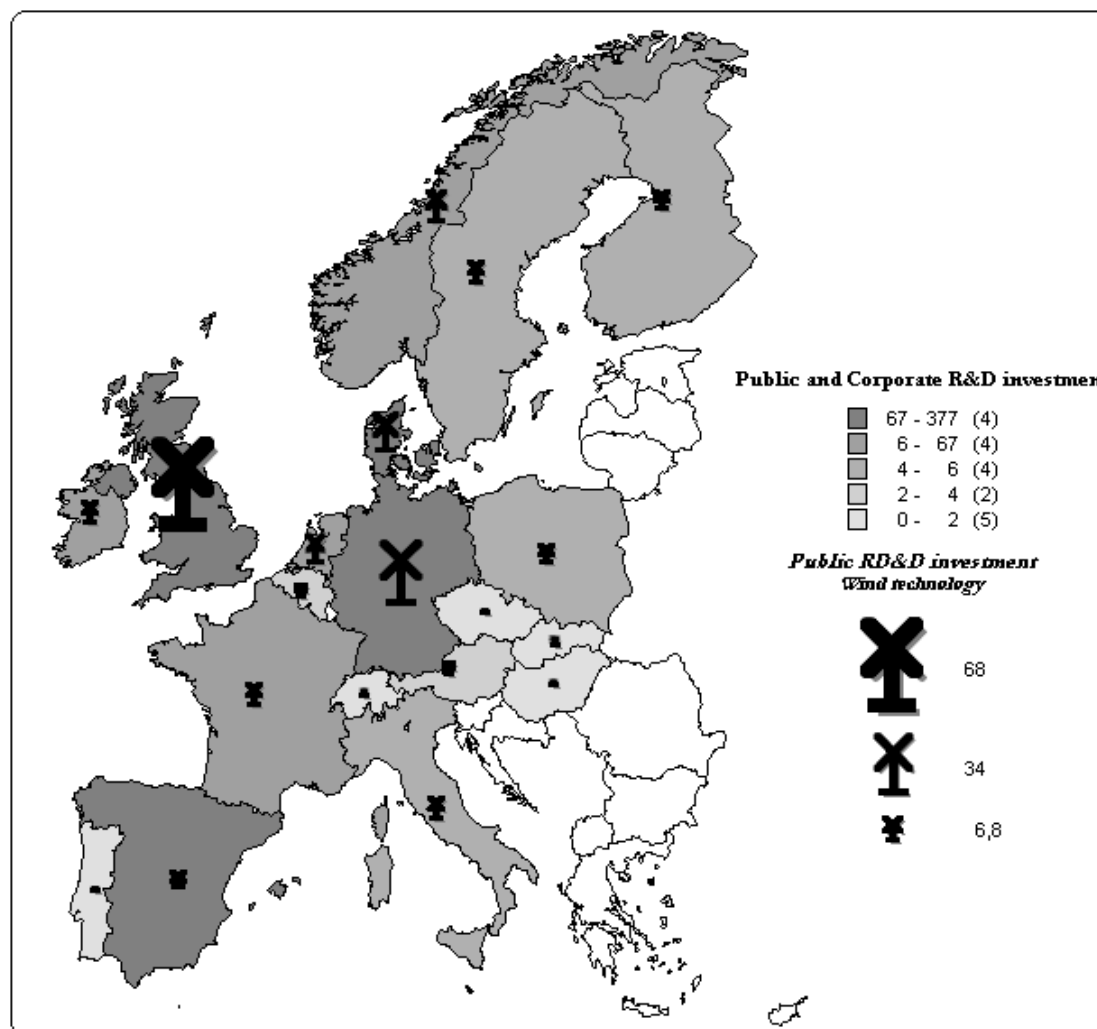


European
Commission

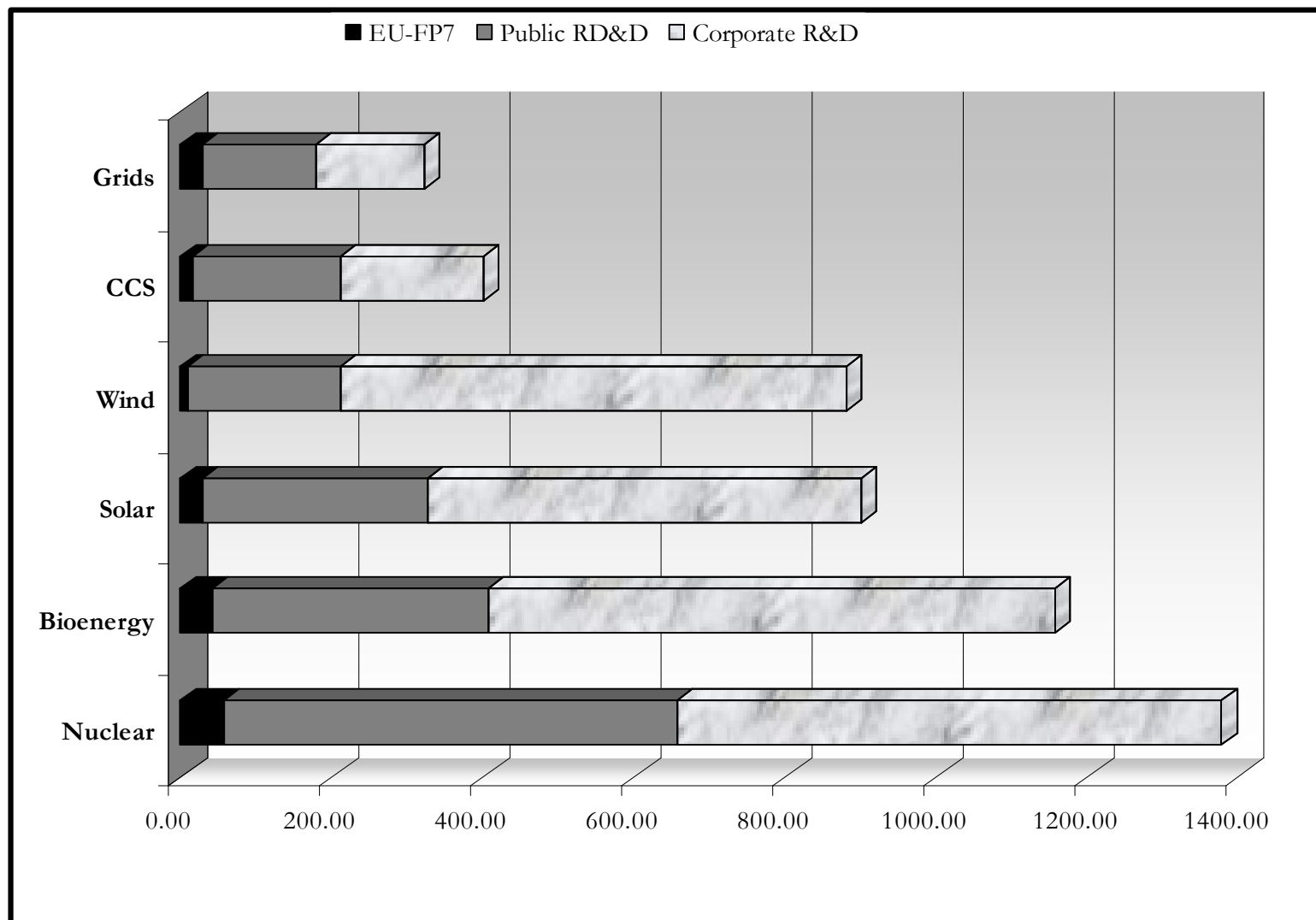
Public and Corporate R&D in wind

Year 2010

- EC 156 € (15%)
- MSs 174 € mil (17%)
- Industry 670 € mil (68%)



Distribution of public and corporate R&D wind technology (2010) JRC
Energy



Public and corporate R&D without EEPR in 2010-JRC



Communication on Energy Technologies and Innovation

Affordable energy technologies

- Wind, solar, marine, geothermal

Cost effective paths towards 2050

- Energy efficiency
- Energy system integration
- Use of ICT

Support industrial policy

- mobilise private and public investment
- Lower the cost of energy

Green growth

- bring energy technologies to use

➤ **May 2013**



European
Commission

Energy

	EU			World		
	Total	Onshore	Offshore	Total	Onshore	Offshore
Cumulative capacity 2011	94	90	3.7	240	236.1	3.9
Installed 2012-2015	51	43.7	7.3	175	162.9	12.2
Annual installation rate	12.8	10.9	1.8	43.8	40.7	3
Installations 2016-2020	70	48	22	300	266	34
Annual installation rate	14	9.6	4.4	60	53.2	6.8
Cumulative by 2020	215	182	33	715	665	50
Installations 2021-2030	135	50	85	750	550	200
Annual installation rate	13.5	5	8.5	75	55	20
Cumulative by 2030	350	232	118	1465	1215	250
Installations 2031-2050	200	40	160	1075	725	350
Annual installation rate	10	2	8	54	36	18
Cumulative by 2050	550	272	278	2540	1940	600

Estimated installed capacity in GW, 2011 - 2050 *2012 JRC wind status report.*

Technology: Support offshore development

- **Substructures**
- **Large scale turbines**
- **Grid integration**

More efficient use of EU support

- **Grants: EU added value**
- **Loans:** closer to the market projects
- **Regional policy :** eg manufacturing , test facilities

Projects/ activities

- **At interfaces - grids, marine, materials, others**
- **Lighthouse**

Creating markets

- **Business models, key regulatory issues, standards**

A large, abstract graphic on the left side of the slide. It depicts a stylized profile of a human head facing right. The interior of the head is filled with a complex, layered image of renewable energy infrastructure, including wind turbines, solar panels, and power lines, all rendered in a blue and white color scheme. The head's outline is composed of flowing, wavy lines.

Thank you for your attention !