

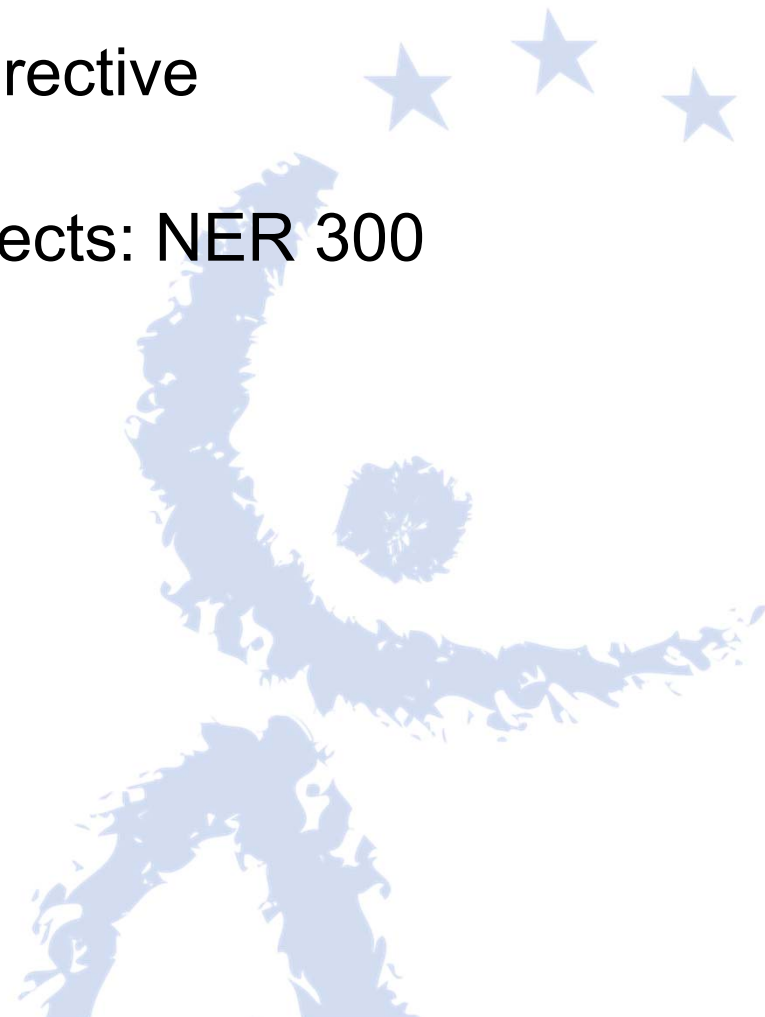
EU legal framework and funding of CCS demonstration projects

6th CO₂ GeoNet Open Forum

Venice, 9-11 May 2011

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European Commission

- ★ Regulatory framework: CCS-Directive
- ★ Funding for demonstration projects: NER 300
- ★ EEPR, Project Network





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CCS-Directive



★ **CCS-Directive (2009/31/EC):**

- ↪ legal framework for the environmentally safe geological storage of CO₂
- ↪ capture and transport regulated through amendments of existing legislation and at national level
- ↪ removes barriers to CCS in existing legislation
- ↪ Member States determine whether and where CCS will happen on their territory
- ↪ to be transposed by 25 June 2011

★ Key Elements of CCS Directive:

- ↪ site selection and exploration
- ↪ storage permits
- ↪ CO₂ stream composition
- ↪ monitoring and reporting
- ↪ closure and post-closure obligations
- ↪ transfer of responsibility
- ↪ financial security and financial contribution
- ↪ emissions captured and stored recognised as not emitted under EU-ETS

★ State of play of implementation:

- ↪ Reporting questionnaire published on 11 Feb 2011, MS report on implementation due within 6 months
- ↪ Transposition deadline 25 June 2011, COM preparing for conformity check
- ↪ COM also preparing for review of draft storage permits (1 to 2 expected in 2011)
- ↪ Continued dialogue with MS in Information Exchange Group, last meeting on 16 March 2011
- ↪ Guidance documents (see next slide)

- ★ **GDs to support coherent implementation of the CCS-Directive across EU**
- ★ **GDs published on CCS website on 31 March 2011:**
 - ↪ GD 1 - CO₂ Storage Life Cycle Risk Management Framework
 - ↪ GD 2 - Characterisation of the Storage Complex, CO₂ Stream Composition, Monitoring and Corrective Measures
 - ↪ GD 3 - Criteria for Transfer of Responsibility to the Competent Authority
 - ↪ GD 4 - Financial Security and Financial Mechanism



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NER 300



- ★ **NER 300:** 300 million allowances reserved in new entrants reserve (NER) of EU-ETS for the financing of commercial-scale CCS and innovative RES demonstration projects, Art. 10a(8) EU-Emissions Trading Directive
- ★ 300 million allowances (depending on carbon price, worth some €4-5 billion) will be distributed through two rounds of Call for proposals (200/ 100 million allowances)
- ★ Wide range of technologies: at least 8 CCS and at least 34 RES projects
- ★ Geographically balanced locations: 1 to 3 projects per MS

- ★ 50% of relevant costs will be funded, per project max.
15% of the total number of allowances
- ★ NER 300 not part of EU budget – can be combined with other instruments, including EEPR and Structural and Cohesion Funds
- ★ Implementation at EU level, but with strong role for Member States, and with support from the European Investment Bank

- ★ Launch of first Call for proposals on 9 November 2010
- ★ Project Sponsor phase completed on 9 Feb 2011
- ★ According to reports from MS, 153 proposals received, including 22 CCS proposals (see next slide)
- ★ MS now have until 9 May 2011 (today!) to check eligibility of projects and submit those eligible projects they wish to support to EIB for further assessment
- ★ Award decisions for the first tranche envisaged for the second half of 2012

TOTAL NUMBER OF CCS PROJECTS	22
power generation: pre-combustion 250 MW [CCSpre]	6
power generation: post combustion 250 MW [CCSpos]	8
power generation: oxyfuel 250 MW [CCSoxy]	4
industrial applications implementing (a) CCS on refineries with 500 kt/y stored CO ₂ from one or more sources within the refinery; (b) CCS application to cement kiln with 500 kt/y stored CO ₂ ; (c) CCS application for primary production routes in iron and steel production with 500 kt/y stored CO ₂ ; or (d) CCS application for primary production routes in aluminium production with 500 kt/y stored CO ₂ [CCSind]	4

- ★ EU has set up a regulatory framework to ensure the environmentally safe geological storage of CO₂
- ★ Funding for large-scale demonstration programmes provides important stimulus for the development of CCS
- ★ NER 300 unprecedented in scope and magnitude (covering CCS and RES demonstration projects, €4-5 billion)
- ★ European approach will ensure highest possible quality of demonstration projects in terms of technological and geographical balance

EEPR and Project Network



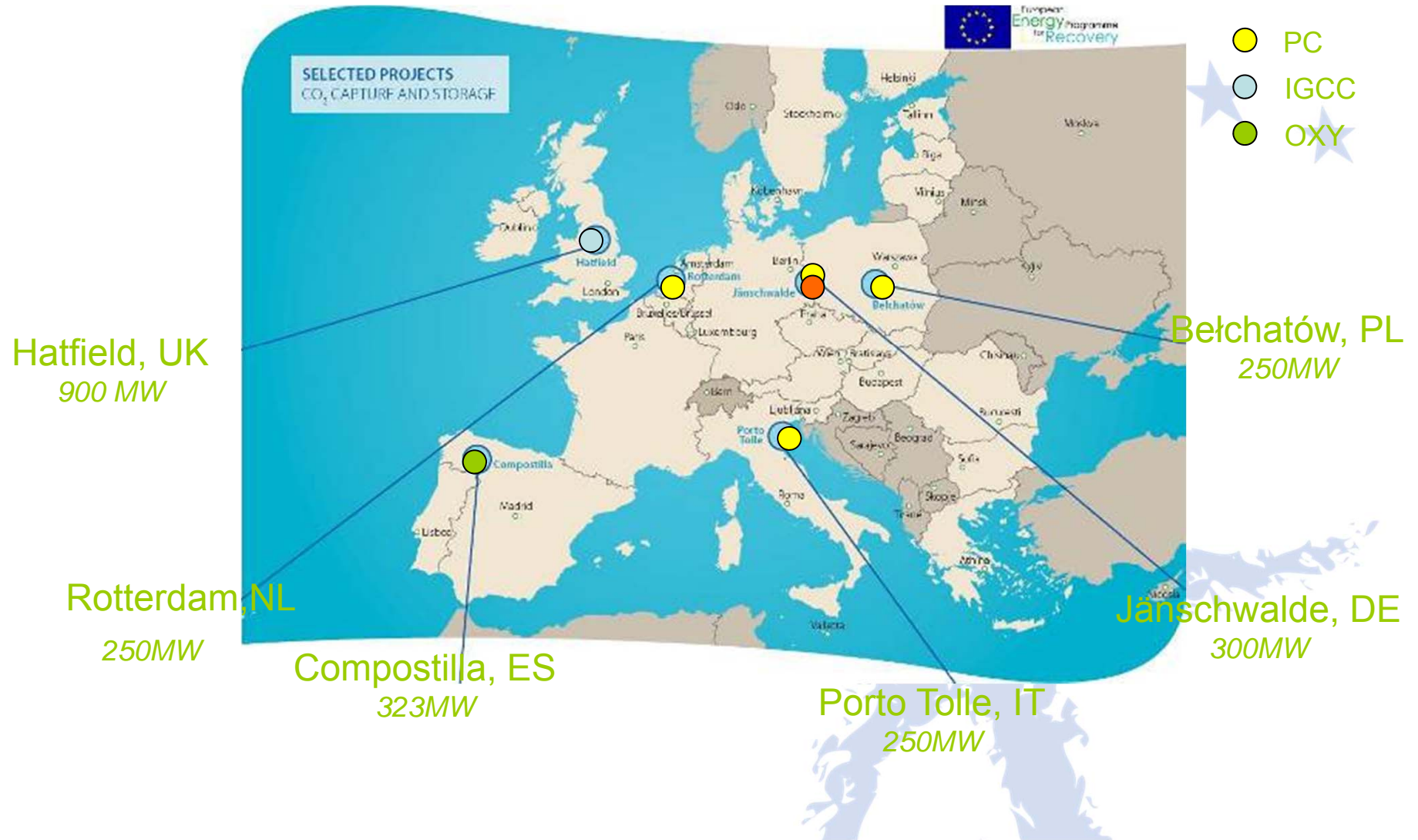
★ €1bn for large-scale CCS demos

↳ Max. €180m per project for incremental CCS investment costs

★ 6 projects have signed grant agreements in 2009/10

↳ Jämschwalde, Hatfield, Porto Tolle, Rotterdam, Bełchatów, Compostilla

EPR projects - locations



- ★ Established in 2010 to generate early benefits from a coordinated European action on CCS demonstration projects.
- ★ Current members: EEPR projects - but CCS demonstration projects fulfilling minimum qualification criteria are invited to join the Network.
- ★ Objectives:
 - Identify best practices and enable knowledge-sharing amongst projects
 - Create a common EU identity for Network members
 - Leverage experience of projects in order to gain public confidence
 - Promote CCS and cooperation with third parties/countries
- ★ Implementation:
 - Meetings, in part on-site
 - Regular reporting and dissemination
 - Advisory Forum for stakeholder guidance

- ★ **CCS website:**
http://ec.europa.eu/clima/policies/lowcarbon/ccs_en.htm
- ★ **CCS mailbox:**
CLIMA-CCS-Directive@ec.europa.eu

- ★ **NER 300 website:**
http://ec.europa.eu/clima/funding/ner300/index_en.htm
- ★ **NER 300 mailbox:**
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- ★ **EEPR website:**
http://ec.europa.eu/energy/eepr/index_en.htm
- ★ **Project Network website:**
<http://www.ccsnetwork.eu/>

Thank you for your attention!

