



Impacts of Public-Public Partnerships - expectations and experiences

ERA NET Cofund
ACT – Accelerating CCS technologies

Gerdi Breembroek (RVO – partner of ACT) and
Ragnhild Rønneberg (RCN, coordinator of ACT)

Annual Joint Programming Conference
23 November 2016

- ACT – status pr. November 2016
 - 10 partners from 9 countries, with a total of 28 M€ + 12,8M€ from the EC
 - 1st Call June 7 2016 – call covering all aspects of CCS
 - received 38 pre-proposals
 - invited 20 proposal to submit full proposals (deadline 16 January 2017)
- Expectations from our network/organisation:
 - International cooperation is necessary to combat climate change
 - CCS is a part of the solution – joint forces works
 - **The overall impact of ACT will be:**
 - Coordination of national and transnational R&D will lead to an acceleration of CCS technology ready for commercialisation.
 - Furthermore, a platform for knowledge sharing will be established and it will be crucial for technology development beyond the early commercial phase.



achieved impact in detail

- Well established cooperation between the ACT partners
 - 10 partners from 9 countries, with a total of 28 M€ + 12,8M€ form the EC
- Ambitious partners and solid budget
- Received proposals addressing interesting and relevant topics that will help implementation of CCS in both the power sector and industry

Thematic areas of the 20 projects

- 9 projects on Capture
- 4 Storage
- 2 Utilisation
- 2 Full chain
- 1 Storage EOR
- 1 Utilisation EOR
- 1 on Full chain CCU

Thematic areas of the 1st Call
(focus on demonstrating and validating solutions)



Thematic areas	Aim
Chain integration	Addressing RD&D gaps in the full CCS chain, including CO ₂ capture, transport, and storage, incorporating related case studies for social acceptance.
Capture	Capture techniques emphasizing efficiency, competitive cost and flexible operations including carbon negative solutions like Bio-CCS and other technologies. Advanced technologies aiming at a higher operational flexibility and energy efficient capture
Transport	Transport options aimed at early operations of European CCS projects.
Storage	Measurement, monitoring and verification (MMV) at relevant storage sites and the surrounding geosphere emphasizing tools and methodology for a safe and cost effective CO ₂ storage in general and an increasing storage efficiency in principle.
Utilisation	CO ₂ utilisation including prospective revenue streams and related business models as a vehicle to make CO ₂ capture and storage viable. CCU which can substantiate comparable storage efficiency to that of geological storage and lead to reduction of the CO ₂ environmental footprint.
TYPE A: Indicative budget in total for up to 5 large projects: 33M€	
TYPE B: Indicative budget in total for up to 5 small projects (each < €3 million): 8,2 M€	

- 13 projects with power/industry participation
- Partners from Canada, Australia, India, France and Sweden (none of these countries are partner of ACT)



achieved impact – visibility

- Web-site www.act-ccs.eu
- **A number of presentation** given at national and international meetings and conferences. This year at *Cato-meeting*, March 2016, *CO₂-GeoNet*, Venice, May 2016 and *CCS Global institute conference*, Oslo Sept. 2016 and many more at national levels in conjunction with the call.
- **1st knowledge sharing workshop**, Lausanne, Switzerland 14. November 2016 (in connection to GHGT-13 Conference)
 - **Topic:** Joint programming and joint calls, selection, funding and monitoring of pilot and demonstration projects: sharing and collaborating with other regions
 - **Invited speakers from:** Canada (NRCan/Regional province), US (DoE), Australia (ANLEC R&D) and representative from IEAGHG
 - **Delegates** from the External expert team of ACT
 - The whole ACT-consortium
- ACT has in short time become a **well-known project /program** for European RD&D cooperation. Additional European countries (e.g. France and Italy) express interest in joining the 2nd call and/or an ACT-2.