

Accelerating CCS Technologies

Workshop UEFISCDI
20 June 2018

Co-funded by the
European
Commission within
the Horizon 2020



Ragnhild Rønneberg
ACT coordinator
The Research Council of Norway
rr@rcn.no

Summing up – already from the start

- Carbon Capture, Utilisation and Storage (CCUS) is a valuable and natural part of the toolbox for combating climate change
- Knowledge sharing and international cooperation – necessary !
- ACT's goal is to stimulate to projects accelerating the deployment of CCS in
 - Energy sector
 - Energy intensive Industries



ACT – Accelerating CCS Technologies

- Cooperation between Funding agencies/Ministries
- Transnational calls
- **1st call for proposals, June 2016:**
 - 10 partners from 9 countries cooperate, 1st call
 - Top up financing from European Commission for the
 - 8 new projects decided for funding in 2017 supported by € 36 M from ACT
- **2nd call for proposals, launched 4 June 2018**
 - 13 partners, now extended with France, US and an additional Greek partner



Ambition of ACT

- International cooperation as a tool for accelerating implementation of CCUS
- fund research and innovation projects that can lead to safe and cost effective technology.



ACT Kicked off in Madrid February 2016



Brian Allison, UK
signing the CA

ACT-partner countries at the ACT kickoff meeting at MINECO, Spain

Projects funded by ACT, 2017-2020

Project	Activities	ACT, M €	Norway	Netherlands	UK	Germany	Romania	Switzerland	Spain	Turkey
ALIGN	Chain integration, clusters	14,5	x	X	x	X	X			
ELEGANCY	Chain integration, hydrogen	8,9	X	x	x	X		x		
PRE-ACT	CO2 storage, pressure handling	4,5	X	x	x	X				
ACORN	Full chain CCS / infrastructure	2,0	x	x	X					
DETECT	CO2 storage, risk assessment	2,0		X	X	X				
ECOBASE	CO2-EOR SouthEast Europe	1,2	X	x			x			x
GASTECH	Gas switching technology	1,7	X	x			x	x	x	x
3D-CAPS	3D printed sorbents	1,5	X	X			x			

- Total budget for 8 projects: € 50 M
- ACT supporting: € 36 M

more info at www.act-ccs.eu

ACT – additional activities



- Knowledge sharing workshops
- Alignment with European CCUS RD&D activities
- Collaboration with European CCUS initiatives
- Strengthen R&D collaboration with Mission Innovation
- Closer cooperation with industry
 - Address industry specific needs in the CCUS field
- **More countries/partners are welcome to join ACT !**



Knowledge Sharing

- ACT is more than just the single projects
- The projects can learn from each other
- The projects should together with the ACT consortium lead to accelerated CCS deployment in Europe
- Everyone should focus on communication of results to CCUS stakeholders, industry, and decision makers
- **Knowledge Sharing Workshop in Romania 24 October 2017 for funded projects**
- Next Workshop in Germany, 13 November 2018
- ...and in Greece in 2019



The 2nd ACT call, 4 June 2018



- **Total budget: 22-30 M€ (no Cofund from EC)**
- Partners with funding from Germany, Greece, France, The Netherlands, Norway, Romania, Switzerland, Spain, Turkey, UK and USA
- Call text – please visit www.act-ccs.eu A great opportunity for anyone who has a unique idea for developing CCUS technology
- Applications must be submitted to the [Research Council of Norway](#)
- Due date for proposals, two stage evaluation:
 - pre-proposals: 12 September 2018, 13:00 CEST
 - full proposals: 1 March 2019, 13:00 CET
- The budget includes a new activity: **Open call** for industrial driven projects (no fixed application date, more flexible approach)



Clean up



Scope of the 2nd ACT call

- ACT will address the technological, environmental, social and economic challenges required to accelerate CCUS.
- Projects that incorporate or address the **Priority Research Directions** (PRDs) identified at the Mission Innovation CCUS Challenge Workshop (Houston 2017) will be particularly welcome.
- Projects are also encouraged to address one or several of the research and innovations activities in the **SET-Plan CCS and CCU Implementation Plan** endorsed by the SET-Plan Steering Group in September 2017.



Timeline for the fixed call



- **4 June 2018:** Call published
- **12 September 2018 at 13:00 CEST:** Due date for submitting pre-proposals, stage 1. Sketches of how the projects will look like.
- **Q4 2018:** Feedback on the result of evaluation of stage 1 applications. Invitation to second stage for all applications passing stage 1.
- **1 March 2019 at 13:00 CET:** Due date for submitting full proposals, stage 2.
- **August 2019:** Evaluation of proposals completed. Signing contracts with new projects.
- **September 2019:** New projects starting
- **Q4 2022:** Projects closing



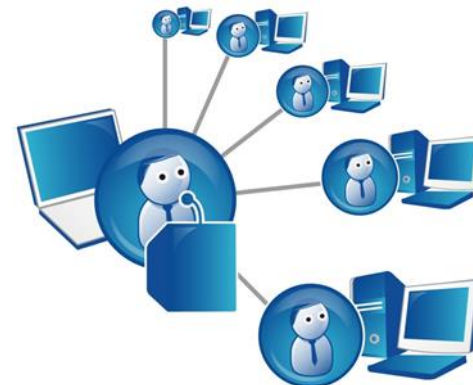
ACT webinar 28 June 14:00 CEST



- The webinar is open to everybody
- The agenda is:
 - Presentation of the ACT Call, by RCN (30 minutes)
 - The ACT consortium will answer questions from the audience (60 minutes)
 - The presentation of the ACT call includes:
 - Thematic priorities in the ACT Call
 - How to build a strong consortium
 - How to write an excellent proposal
 - The submission system
 - Evaluation procedures



How or join the webinar ?



- If you like to join the webinar you just send a short e-mail to Aage Stangeland, ast@rcn.no , at ACT Call Secretariat
- The webinar will be set up as a Skype meeting



ACT has created a momentum



- **8 high level projects were decided funded in 2017 – they run for 3 years - The projects in total cover CCS/CCUS chains**
- **New projects will be funded in 2019 – high expectations to the CCS community to come up with excellent proposals in 2018!**
- Brings together expertise from several countries - knowledge sharing
- ACT is a tool for achieving the targets set out in the EU SET-Plan CCUS Implementation Plan and in the Mission Innovation Priorities of CCS Research
- Big interest for ACT outside Europe, including USA and Asian countries
- Industry shows interest:
 - Hydrogen production coupled with CCS
 - Pressure management during CO₂ storage



Thank You for Your Attention!



Ragnhild Rønneberg, PhD, coordinator of ACT rr@rcn.no

Welcome - visit us at www.act-ccs

Or contact Nicoleta Dumitrache nicoleta.dumitrache@uefiscdi.ro