



Nordic Energy
Research

Webinar for the ACT-CCS programme call 2020

31st of August, 14.00-15.30 CEST

The webinar will begin shortly

AGENDA

- **Introduction of Nordic Energy Research**
Sofia Elamson, Jun Elin Wiik and Nicki Carnbrand Håkansson (NER)
- **Overview of the ACT3 call and the ACT initiative**
Aage Stangeland (RCN)
- **How to apply for funding from Nordic Energy Research within the ACT3 call**
- **Questions & Answers**



WEBINAR RULES AND ETIQUETTE

We ask you to, please:

- Mute your microphone.
- Write your questions and comments in the chat, they will be addressed in the end at the Q&A-session.
- Write concise messages that are coherent to the topic.
- We will distribute the word among the questioners. If needed, we might ask you to clarify your question orally.
- The slides and a compilation of the Q&A will be made available after the event.





INTRODUCTION OF **NORDIC ENERGY RESEARCH**

Who are we?



Sofia Elamson,
Adviser

sofia.elamson@nordicenergy.org



Nicki Carnbrand Håkansson,
First consultant

nicki.hakansson@nordicenergy.org



Jun Elin Wiik,
Senior Adviser

jun.wiik@nordicenergy.org



INTRODUCTION OF **NORDIC ENERGY RESEARCH**

What do we do on CCUS?

Negative CO₂

Our “flagship project” Negative CO₂ is focusing on bio-CCS with a special aim of taking the CO₂ capturing-technology *Chemical Looping Combustion* to the next level in its development by upscaling it to a semi-commercial scale. The project ends in 2020.

NGCCUS

NGCCUS consists of representatives from the Nordic and Baltic countries’ authorities and ministries. The group mainly focuses on cooperation within CCUS policy development and works as a platform for discussing CCUS policy and strategy issues.

ACT

Together with ACT, Nordic Energy Research aims at facilitating the emergence of CCUS via transnational funding. NER wishes to fund various types of projects – e.g. of sociological or economical character – as long as at least two Nordic partners are participating.

“CCU-net” within the Nordic or Nordic-Baltic PhD and Researcher Mobility Programme

Nordic Energy Research has officially signed an agreement on funding for the project *Material technologies for post-combustion CO₂ capture and utilization network* – or “CCU-net”.

Read more here:

<https://www.nordicenergy.org/project/ccus/>

Accelerating CCS Technologies

Co-funded by the
European
Commission within
the Horizon 2020



Webinar 31 August 2020

The ACT₃ call

Dr. Aage Stangeland

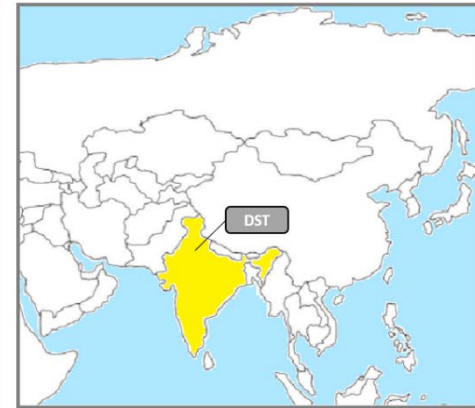
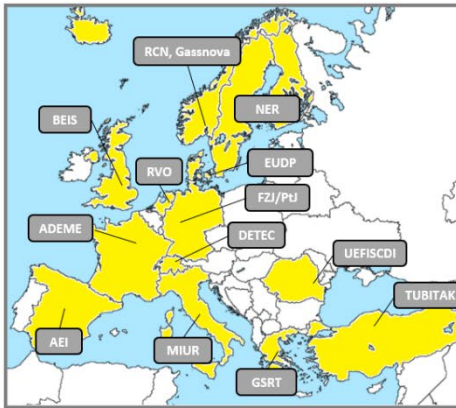
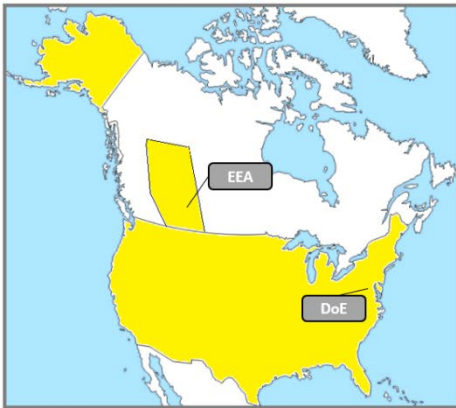
The Research Council of Norway / ACT coordinator

Email: ast@rcn.no

Web: <http://www.act-ccs.eu/>

This is ACT

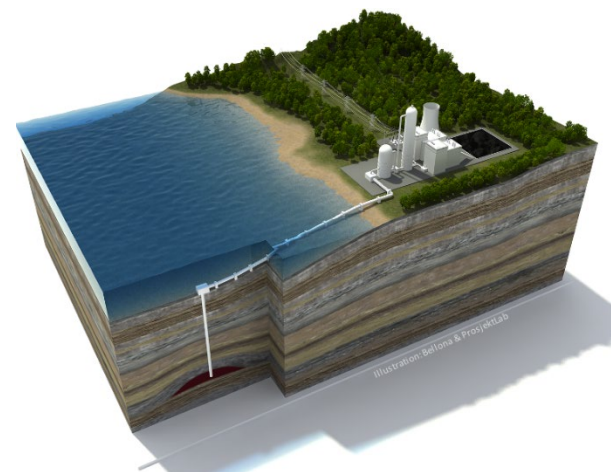
Funding agencies from 16 countries, regions, and provinces are collaborating on calls and knowledge sharing within CCUS



- Alberta (Canada)
- USA
- Denmark
- France
- Germany
- Greece
- Italy
- The Netherlands
- Norway
- Nordic countries
- Romania
- Spain
- Switzerland
- Turkey
- UK
- India

The ACT₃ Call

- The ACT3 Call is available at the ACT web site:
<http://www.act-ccs.eu/calls>
- Thematic wide within all aspects of CCUS
- National requirements and priorities apply
- Asking for research and innovation projects that can lead to safe and cost effective CCUS technology development
- Aims at establishing international cooperation for accelerated CCUS deployment in the power and industry sectors



Call budget

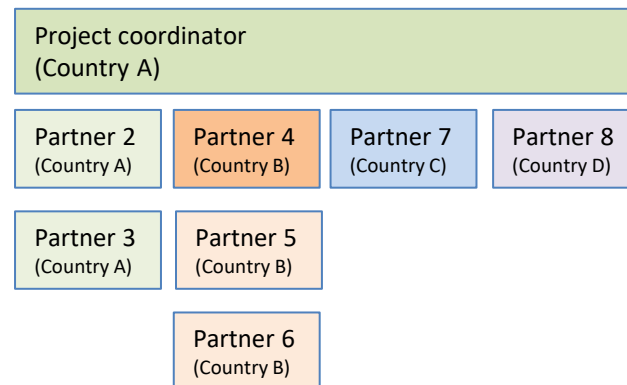
Participating country/region	Funding organisation	Budget
Canada, Province of Alberta	Emissions Reduction Alberta (ERA)	\$5 million CAD
Denmark	The Danish Energy Agency – Energy technology development and demonstration program (EUDP)	€ 3 million
France	The French Agency for the Environment and Energy Management (ADEME)) and Agence Nationale de la Recherche (ANR)	€ 2 million
Germany	Forschungszentrum Jülich GmbH, Projektträger Jülich (FZJ/PtJ)	€ 3 million
Greece	General Secretariat for Research and Technology (GSRT)	€ 1 million
India	Department of Science and Technology (DST), Ministry of Science and Technology, Government of India	€ 1 million
Italy	Ministry for Universities and Research (MIUR)	€ 0.6 million
The Netherlands	Rijksdienst voor Ondernemend Nederland (RVO)	€4 million
Nordic Countries	Nordic Energy Research (NER)	NOK 3.0 million
Norway	The Research Council of Norway (RCN)	NOK 60 million
Romania	Executive Agency for Higher Education, Research and Innovation Funding (UEFISCDI)	€ 0.5 million
Switzerland	Swiss Federal Department for the Environment, Transport, Energy and Communications (DETEC)	CHF 3 million
Turkey	The Scientific and Technological Research Council of Turkey (TUBITAK)	€ 0.4 million
United Kingdom	Department for Business, Energy and Industrial Strategy (BEIS)	Subject to approval
United States	Department of Energy (DoE)	US\$ 2 million

ACT₃ – A two-stage process

- **Pre-proposals**
 - Due date for submission of pre-proposals **10 November 2020 at 13:00 CET**
 - Pre-proposals shall be submitted to RCN by email to act-ccs@rcn.no
 - ACT templates must be used
 - Proposals will be assessed by the national funding bodies
 - The successful consortia will then be invited to elaborate their pre-proposals and produce a full proposal
- **Full proposals**
 - Due date for submission of full proposals **15 March 2021 at 13:00 CET**
 - Only applicable to consortia with an invitation to submit full proposals
 - Full proposals shall be submitted to the RCN web-based portal
 - ACT templates must be used
 - Full proposals to be evaluated and ranked by independent international experts
- **New projects starting end September 2021**

ACT applications

- Partners from at least three ACT countries
- One project coordinator for the international project
- National contact points for each participating countries
- No money flow across country borders
- Specific requirement for all ACT countries
 - Public funding rate
 - Minimum and maximum funding
 - Basic research vs applied research
 - Industrial participation
- Conditions for large projects
 - > € 4 M from ACT or > 10 partners.
 - Need partners from at least four countries.
 - Industry involvement required



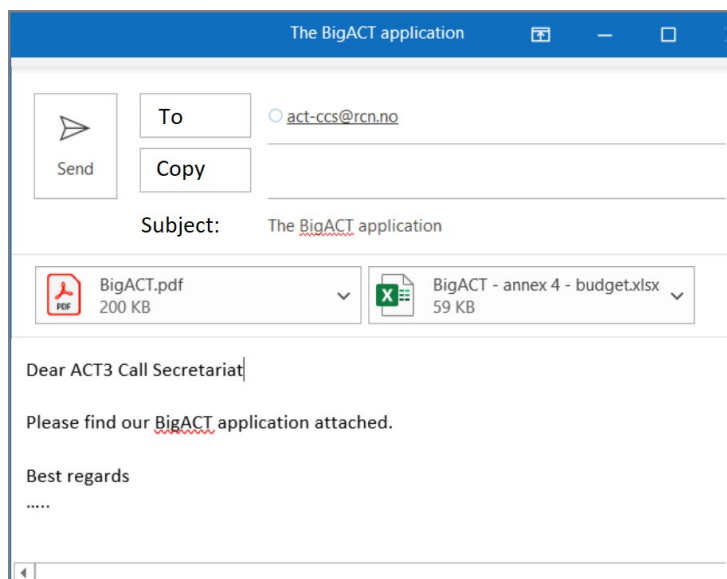
A typical consortium for an ACT project

Applicants from two Nordic countries applying for funds from NER will together count as one partner in the total project proposal.

Recommendations

- Read the call text!
- Read the national annexes!
- Your project must have an added value in all participating countries
- Your application must have a clear description on how the evaluation criteria are met: Excellence, Impact, and Implementation
- Start discussion on Consortium Agreement already now
- Involve industrial partners (important in some countries)
- Effective collaboration across borders are needed
- An ACT project is more than a collection of national sub-projects
- Need a plan for dissemination beyond scientific papers
 - Seminars targeting decision makers
 - Webinars, blog, social media
 - Participate in the public debate on how to combat global warming

How to submit an application



1. Send your application on email to act-ccs@rcn.no
2. Attach your application as a PDF file based on the template given in the call announcement at <http://www.act-ccs.eu/calls>
3. Project budget based on template given in the call announcement must be attached as a Microsoft Excel file.
4. Send the email before the deadline 10 November 2020 at 13:00 CET
5. The application must be submitted on email by the project coordinator on behalf of all project partners
6. Some ACT countries require additional national submission. Make sure all national requirements for submission are fulfilled. Details are given in Annex 1 to the Call Text

1st ACT call. Projects funded, 2017-2020

Project	Activities	ACT, M €	Norway ⁵	Netherland	UK	Germany	Romania ^d	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	CO ₂ storage, pressure handling	4,5	X	X	X	X				
ACORN	Full chain CCS / infrastructure	2,0	X	X	X					
DETECT	CO ₂ storage, risk assessment	2,0		X	X	X				
ECOBASE	CO ₂ -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 of which € 36 M from ACT partners

bold X = lead country

Project's final events summer and autumn 2020

Large projects in **blue**

ACT2: Projects funded, 2019-2022

Projects	Activities	ACT, M€	France	Germany	Greece	Netherlands	Norway	Romania	Spain	Switzerland	Turkey	UK	USA
AC2COM	Oxyfuel technology in Cement production	3,0	x	x	x		x			x			
ACTOM	Offshore Monitoring	1,5				x	x					x	x
ANICA	Carbonate Looping Process in cement industry	2,4		x	x							x	
DIGIMON	Digital Monitoring of CO2 storage projects	5,0		x	x	x	x	x				x	x
FUNMIN	CO2 mineralisation into anhydrous MgCO3	0,7	x						x			x	
LAUNCH	CO2 capture in various industries	5,1		x		x	x					x	x
MemCCSea	Membrane systems for CO2 capture and storage at sea	1,7		x	x		x						x
NEWEST-CCS	Negative Emissions in the Waste to Energy Sector	2,2		x		x	x					x	
PRISMA	Sorbent Materials for energy efficient carbon capture	2,1					x			x		x	x
REX-CO2	Reusing existing wells for CO2 storage	2,5	x			x	x	x				x	x
SENSE	CO2 storage sites - ground surface monitoring	2,7	x	x			x		x			x	x
SUCCEED	CO2 storage Coupled with geothermal Energy Deployment	2,5				x					x	x	

Total budget € 43.5 M of which € 31,5 M from ACT

Green x = lead country

ACT Knowledge Sharing

- Annual Knowledge Sharing Workshops
- The projects should together with the ACT consortium lead to accelerated CCS deployment
- ACT projects must focus on communication of results to CCUS stakeholders, industry, and decision makers
- Next Knowledge Sharing Workshop 16-17 November 2020 as a virtual meeting

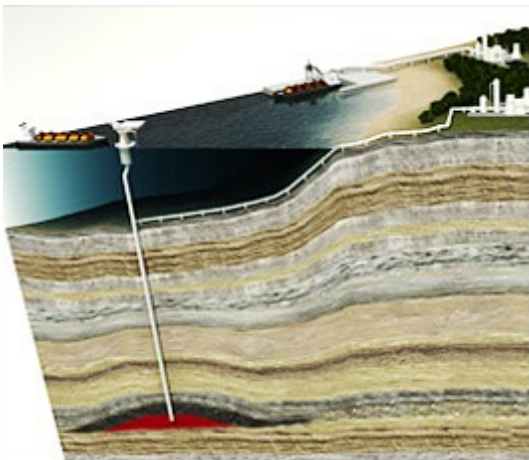


Results from ACT projects

- Reduce costs
- Reduce risk
- New technology
- Safe storage
- Optimising infrastructure
- Business models
- Social awareness



Impact from ACT projects



- ACT projects should play a key role in large scale CCUS deployment

Communication

- Large international R&D projects open up for stronger communication of results to stakeholders and decision makers.
- ACT projects is expected to have strong dissemination plans:
 - Scientific publications
 - Dissemination beyond scientific papers



National contact points

Please discuss with your national contact point

	Organisation	Name	e-mail	Phone
Canada - Alberta	ERA	Mark Summers	msummers@eralberta.ca	+1-780-498-2544
Denmark	ENS/EUDP	Annika Fischer	afi@ens.dk	+45 25 72 82 93
		Lærke S. Hansen	Lksh@ens.dk	+45 33 92 68 75
France	ADEME	Aïcha El khamlichi	Aicha.elkhamlichi@ademe.fr	+33 2 41 20 82 25
Germany	PTJ	Hannes Stadler	h.stadler@fz-juelich.de	+49 2461 61 85352
		Heiko Gerhauser	h.gerhauser@fz-juelich.de	+49 2461 61 96830
		Annette Weiß	a.weiss@fz-juelich.de	+49 2461 61 9025
Greece	GSRT	Anna Rosenberg	a.rosenberg@gsrt.gr	+30 2131300095
India	DST	Neelima Alam	neelima.alam@nic.in	+91-11-26590467
		Sanjai Kumar	sanjai.k@gov.in	+91-11-26590270
		Sanjay Bajpai	sbajpai@nic.in	+91-11-26565337/ 26590283
Italy	MIUR	Maria Bianco	maria.bianco@miur.it	+39 06 9772 7146
		Aldo Covello	aldo.covello@miur.it	+39 06 9772 6465
The Netherlands	RVO	Gerdi Breembroek	gerdi.breembroek@rvo.nl	+31 6 5256 4480
		Peter Balemans	Peter.balemans@rvo.nl	+31 6 1589 7704
Nordic Energy Research	NER	Nicki Carnbrand Håkansson	Nicki.Hakansson@nordicenergy.org	+47 948 59 850
Norway	RCN	Aage Stangeland	ast@forskningsradet.no	+47 95 82 29 03
		Siri Kinge Ovstein	sov@forskningsradet.no	+47 92 41 46 49
Romania	UEFISCDI	Nicoleta Dumitrache	nicoleta.dumitrache@uefiscdi.ro	+40 21 302 38 86
Switzerland	DETEC	Gunter Siddiqi	gunter.siddiqi@bfe.admin.ch	+41 58 462 5324
Turkey	TUBITAK	E. Burcu Yamak	Burcu.yamak@tubitak.gov.tr	+903122981812
United Kingdom	BEIS	Brian Allison	brian.allison@beis.gov.uk	+44 300 06 85358
		Hannah Lord	hannah.lord@beis.gov.uk	+44 300 06 85547
United States	DOE – Office of Fossil Energy	Mark Ackiewicz	mark.ackiewicz@hq.doe.gov	+1 301 903 3913
		Darin Damiani	darin.damiani@hq.doe.gov	+1 202 287 5282
		Lynn Brickett	lynn.brickett@hq.doe.gov	+1 412 260 7345
		Amishi Kumar	amishi.kumar@hq.doe.gov	+1 301 903 7637

Key messages

- The ACT₃ call is open
- Due date for pre-proposals
10 November 2020
- Due date for full proposals
15 March 2021
- Read the call text!
- Read the national annexes!
- Applications must have partners from three ACT₃ countries/regions
- Applications should play a key role in large scale CCUS deployment
- Contact national contact points or call secretariat if you have questions



How to apply for funding from
Nordic Energy Research
within the ACT₃ call





How to apply for funding from **NORDIC ENERGY RESEARCH** *within the ACT₃ call*

What research topics are we looking for?

- CCUS business models.
- Public acceptability.
- Environmental, climate and policy issues.
- Laws and regulations.

What should an applicant keep in mind?

- Nordic added value.
- Gender balance and gender perspectives.
- State aid rules/De Minimis Aid obligations.

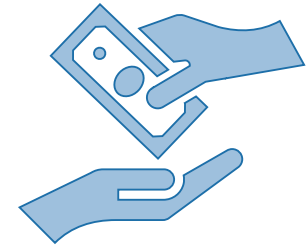
More information about NER:s call and needed templates can be found here: <https://www.nordicenergy.org/call/third-call-for-proposals-under-act/>



How to apply for funding from **NORDIC ENERGY RESEARCH** *within the ACT₃ call*

What is the available budget?

- NER has allocated **3 MNOK** to fund Nordic project partners in the Call for Proposals ACT₃.
- NER anticipate funding two projects, depending on quality, size and applied funding of the project proposals.



More information about NER:s call and needed templates can be found here: <https://www.nordicenergy.org/call/third-call-for-proposals-under-act/>



How to apply for funding from **NORDIC ENERGY RESEARCH** *within the ACT3 call*

Who is eligible to apply for funding from us?

- Partners from **Denmark** (*incl. Greenland and the Faroe Islands*), **Finland** (*incl. Åland Islands*), **Iceland**, **Norway** and **Sweden**.
- NER may offer support to Nordic project partners if there are a minimum of **two Nordic partners from two different Nordic countries involved in a project**.
 - Please note that applicants from two Nordic countries applying for funds from NER will together count as one partner in the total project proposal.
- NER supports research within public and private entities such as:
 - Universities and research institutes,
 - Companies,
 - Municipalities.



How to apply for funding from **NORDIC ENERGY RESEARCH** *within the ACT₃ call*

A two-stage submission procedure is adopted within ACT. For applicants applying for funds from NER:

- **Stage 1:** Submission of pre-proposal via email. The project outline and budget template shall be filled out and sent via email to info@nordicenergy.org.
- **Stage 2:** Submission of full proposal. Please submit the full proposals to Nordic Energy Research via the NordForsk application portal (opens 15 December 2020, *by invitation only*).

More information about the application procedure can be found in the official ACT₃-calltext, here:
<https://static1.squarespace.com/static/5672ab009caddb60e553e3529/t/5f324324d3139178b4ad9fb9/1597129514031/ACT3+Call+Text+-+Version+5.pdf>



How to apply for funding from **NORDIC ENERGY RESEARCH** *within the ACT₃ call*

Key messages

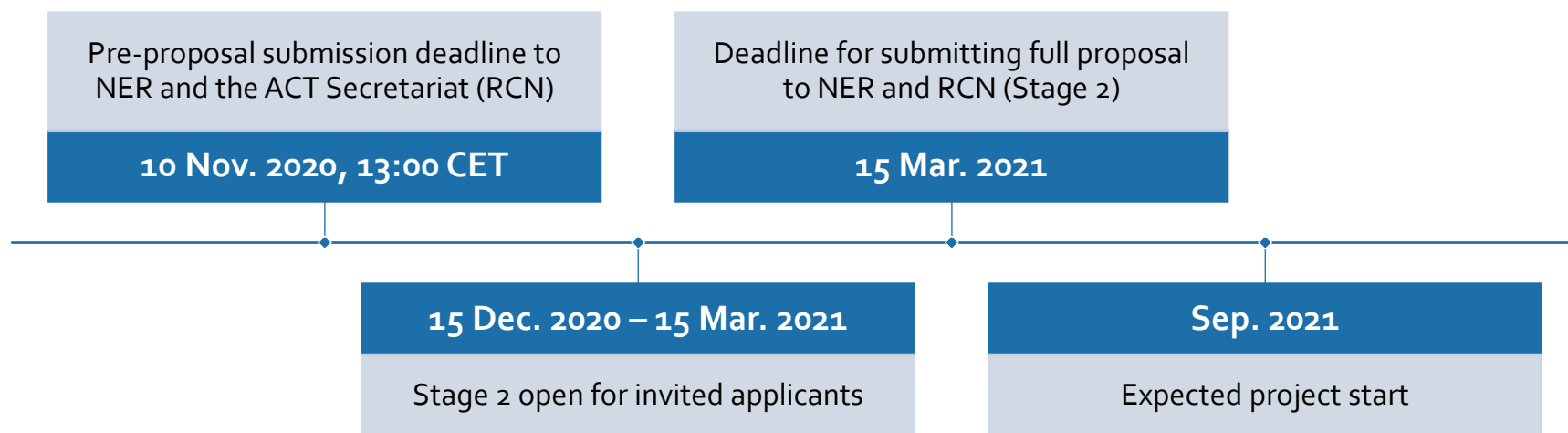
- The project consortia is required to submit an application to the Research Council of Norway, who administer the ACT Programme on behalf of the ACT Consortium, **in addition to the national/regional application to Nordic Energy Research**. If both organizations do not receive the application respectively, the application will be deemed as **ineligible**.
- **NER** require a minimum of two Nordic partners from two different Nordic countries in a project and **the ACT Initiative** require a minimum of three partners from a minimum of three different countries/regions participating in the ACT₃-call.
 - Applicants from two Nordic countries applying for funds from NER will together count as one partner in the total project proposal within ACT.
- It is highly recommended to **consult the national/regional requirements** stated in the call text and to contact your national/regional contact point to sort out any questions.

More information about the application procedure can be found in the official ACT₃-calltext, here:

<https://static1.squarespace.com/static/5672ab009cad60e553e3529/t/5f324324d3139178b4ad9fb9/1597129514031/ACT3+Call+Text+-+Version+5.pdf>



TIMING AND DEADLINES OF THE CALL



USEFUL LINKS

The information page on funding in ACT for Nordic Energy Research:

<https://www.nordicenergy.org/call/t hird-call-for-proposals-under-act/>

Link to the Danish ACT-call:

<https://ens.dk/ansvarsomraader/forsk ning-udvikling/eudp>

The official ACT-matchmaking site:

<http://www.act-ccs.eu/matchmaking>

Link to the Norwegian ACT-call:

<https://www.forskningsradet.no/om-forskningsradet/programmer/climit/>

Thank you for your attention!

