

The RouteCCS Project

The RouteCCS Project



RouteCCS - Routing Deployment of Carbon Capture, Use and Storage in the Baltic Sea Region (BSR)



Polish Geological Institute
National Research Institute

UNIVERSITÄT GREIFSWALD
Wissen lockt. Seit 1456



Project phase: September 2020-October 2021

Partners: Uppsala University, BASRECCS, Tallinn University of Technology (TalTech), Polish Geological Institute-National Research Institute (PGI-NRI), Interdisciplinary Centre for Baltic Sea Region Research (IFZO) - University of Greifswald, Åland University of Applied Sciences

Funder: Swedish Institute

Objective: The overall aim is to strengthen networking on tackling climate change through technology such as Carbon Capture, Use and Storage (CCUS) in the Baltic Sea Region (BSR) between stakeholders such as authorities, companies, universities and experts in order to facilitate deployment of a large-scale CCUS project. Full-scale CCUS projects play a vital role in meeting the objectives of the Paris Agreement and in mitigating climate change.

Outcome: The outcome of the seed funding project will be a review and update of the current situation in the BSR countries concerning the whole chain of CCUS including regulations, the detailed plan for the next steps, and a list of the most potential funding sources.



The RouteCCS Project: The motivation

- All credible scenario modelling shows that CCS/CCUS will be essential to meeting the targets set by the Paris Agreement (IAE, 2020).
- CC(U)S projects are gaining increasing policy support around the world. However, **the BCR is still lagging behind in deploying a large-scale CCS/CCUS due to the policy and regulatory issues and public awareness in most of the countries in the region,** although a large theoretical capacity to geologically store CO₂ exist in the Baltic Basin (Sweden, Latvia, Lithuania, Poland, Russia).
- Knowledge sharing is vital to increase the pace.

The RouteCCS Project: The motivation

- **CO₂ storage is currently either permitted with different limitations** (Denmark, Germany, Poland, Sweden) **or prohibited** for various reasons (Finland, Estonia, Latvia and Lithuania), or CCS/CCUS laws are not yet introduced (Russia and Belorussia).
- **Deployment of the Carbon Capture (Use) and Storage (CCS/CCUS) technology demands a well-connected region acting within the same framework, rules and conditions.**
- Thus, policy and regulatory changes are required in the entire BSR.

The RouteCCS Project: The Objective



To strengthen networking on tackling climate change through the CCS/CCUS technology between stakeholders such as authorities, companies, universities and experts in order to facilitate deployment of a large-scale CCUS project in the BSR.



An enlarged BASRECCS network and intensified networking operations.

The RouteCCS Project: Project deliverables

International agreements						National CCS laws (EU CCS Directive)					
Country	London Convention 1972	London Protocol 1996 (LP)	Amendments to LP		HELCOM 1992	OSPAR 1992	CO ₂ storage permitted for Industrial Scale			Research	Exploration permit always required
			2006 (LP.1(1))	2009 (Article 6) (LP.3 (4))			Onshore	Off-shore	Temporal restriction		
Denmark	X	X	X		X	X	Forbidden until 2020	Yes for EOR	Until 2020	X	X*
Estonia		X	X		X	EU sign.	No	No		X	
Finland	X				X	X	No	No		X	
Germany	X	X	X		X	X	Up to 4 Mt CO ₂ annually and maximum 1.3 Mt per one project.		Until 2018	X	X
Latvia					X	EU sign.	No	No		X	X
Lithuania					X	EU sign.	X	X		X	X
Poland	X				X	EU sign.	Not permitted, except for demo-projects		Until 2024	X	X
Sweden	X	X	X		X	X	No	X		X	X
Norway	X	X	X	X		X	No	X		X	
Russia	X				X	NA	NA	NA	NA	NA	NA
Belarus	X					NA	NA	NA	NA	NA	NA

- Output 1: Report on the state of play in the BSR, including description of the situation in the countries concerned, as well as a description of the target groups addressed by the future project and their needs.
- This will be conducted through an exchange of information with relevant stakeholders, studying of existing regulatory frameworks and by mapping of data availability.

Ratified international agreements and national CCS laws in the BSR countries (CGS Baltic seed project (S81), April 2017). RouteCCS

The RouteCCS Project: Project deliverables



- **Output 2: The main (large-scale) project work plan** with a composition of project partnership and a budget plan.

RouteCCS 2050 - Deployment of Carbon Capture, Use and Storage (CCUS) in the Baltic Sea Region

The RouteCCS Project: Project deliverables

The most potential funding sources, including objectives, requirements and possible funding deadlines will be prepared for this output.

- **Output 3: Report on funding possibilities** for the main project.



The RouteCCS Project: The Communication Plan

- The project findings will be officially presented at **Baltic Carbon Forum 2021** .
- **A special session linked to the BCFs 2020** (Session 2: “CCUS, state of the art in the BSR”) and BCF2021 organised to target the policy makers, members of national parliaments, energy agencies, ministries of environment and industrial stakeholders.
- **A policy brief** will be published to communicate more effectively with the policy makers and the public.
- A project collaboration tool as well as a communication platform will be also a **website**, which will be used for **dissemination of the project results to a wide range of existing or potential stakeholders**. The site will be regularly updated so it could also serve as a calendar and list of happenings.

The RouteCCS Project: Project Partners



UPPSALA
UNIVERSITET



BASRECCS

TAL
TECH

UNIVERSITÄT GREIFSWALD
Wissen lockt. Seit 1456



RouteCCS



HÖGSKOLAN PÅ ÅLAND
ÅLAND UNIVERSITY OF APPLIED SCIENCES