

ENeRG GEO ENeRGY

19th CO2GeoNet Open Forum



The 19th CO2GeoNet Open Forum, titled “Building CCS collaboration: let’s go further together!”, was held from 18–21 May 2026 on San Servolo Island in Venice, Italy.

The event brought together 90 participants from across Europe and beyond. Among them were members of ENeRG and CO2GeoNet partner institutions, including OGS, Sapienza University of Rome, and GeoEcoMar.

The Forum focused on advancing carbon capture and storage (CCS) value chains, strengthening international partnerships, and sharing practical experiences from ongoing and emerging CCS projects. Key discussions addressed public engagement strategies, regulatory frameworks, and the development of robust business models for CCS deployment. Participants also highlighted operational projects where CO₂ storage is already underway, alongside new initiatives entering implementation phases, with an emphasis on overcoming remaining technical, regulatory, and societal barriers.

The event featured 35 speakers who contributed through presentations and panel discussions, fostering interdisciplinary dialogue across academia, industry, and policy stakeholders.

Alongside the main programme, two technical workshops enriched the Forum. A pre-Open Forum workshop titled “Advances in Modelling and Monitoring for CO₂ Storage Assurance” was held on 18 May 2026 in collaboration with the Norwegian University of Science and Technology (NTNU), the Centre for Geophysical Forecasting (CGF), and the EU SMILE Marie Skłodowska-Curie Doctoral Network. A post-Open Forum workshop, “Advancing Saline Aquifer Storage Opportunities,” followed on 21 May 2026 and was organised in collaboration with EuroGeoSurveys.

ENeRG members made important contributions throughout the Forum.



Figure 1. 19th CO2GeoNet Open Forum, 18–21 May 2026, Venice, Italy.

Barbara Merson from OGS and CO2GeoNet Secretary General was responsible for the whole technical organisation of the event.

On 20 May, Sabina Bigi from Sapienza University of Rome, co-chaired the session “In-country Updates on CCS Progress” together with Serge van Gessel (CO2GeoNet–TNO).

The Eastern Lights project, in which GeoEcoMar is a partner, was presented by Tanya Nikolova from Efund LTD, delivering the presentation “Eastern Lights: Uniting People, Regions, and Disciplines to Shape Europe’s CO₂ Storage Future”.

Alexandra Dudu from GeoEcoMar additionally presented two scientific posters titled “2 Years of Environmental Monitoring of a Natural Laboratory for the Study of CO₂ Geological Storage” and “Towards Risk-Informed Conformance Assessment and Multi-Physics Monitoring for Secure Geological CO₂ Storage”.

The CTS project, involving several ENeRG members as SHOGenenergy, GeoEcoMar and the Ukrainian partner, was presented in the session “Building Full-Scale CCS Projects” by project coordinator Roman Berenblyum (CO2GeoNet–NORCE). An additional poster was presented by consortium partner Universidade de Évora

under the Portugal scenario study titled “CCS Long-Term Scenarios in Portugal: Can Direct Injection from Ship Play a Role? A Cost Assessment”.

The Forum confirmed the growing maturity and momentum of CCS developments across Europe, driven by the integration of full CCS value chains and strong international cooperation. Discussions highlighted that successful deployment depends on aligning technological innovation with effective regulation and learning from both operational and emerging CO₂ storage projects. Overall, the event underscored that continued collaboration among research, industry, and policy stakeholders remains essential to overcoming remaining barriers and enabling the socially accepted development of CO₂ storage in Europe and beyond.

More information about the event and posters is available at <https://conference2026.co2geonet.com/>

Yuliia Demchuk
Board member
Geothermal Ukraine



Barbara Merson
OGS
Secretary General
of the CO2GeoNet
Association



The Newsletter content

PAGE 2: Eastern Lights: Unlocking Onshore CCUS Potential in Eastern Europe

PAGE 3: Transdisciplinary and deliberative equity appraisal of transition policies in energy and mobility (Acronym: TANDEM)

PAGE 4: BASRECCS Student Activities and Baltic Carbon Forum 2026

Eastern Lights: Unlocking Onshore CCUS Potential in Eastern Europe

The Eastern Lights project is a Horizon Europe-funded initiative aiming to pave the way for the first large-scale onshore CCUS cluster in Eastern Europe. Coordinated by Holcim Bulgaria, the project brings together 19 partners from 8 countries, including research institutes, universities, industrial companies, and policy organisations. GeoEcoMar, a member of ENeRG from Romania, is one of the project partners.

Eastern Lights focuses on one of the key challenges of Europe's decarbonisation pathway: enabling safe, economically viable, and socially accepted CO₂ transport and geological storage solutions in regions where such infrastructure is still largely absent. The project specifically targets North-West Bulgaria, where deep saline aquifers are being investigated for their potential to permanently store industrial CO₂ emissions.

The project addresses the whole CCUS value chain, with particular emphasis on CO₂ transport and storage. A major objective is to demonstrate cross-border CO₂ transportation from Türkiye to Bulgaria by road, in addition to evaluating potential rail, maritime, and pipeline solutions. In parallel, the project is advancing the characterisation of geological



formations suitable for long-term CO₂ storage.

Scientific work during the first project phase has focused on reducing subsurface uncertainty through geological screening, reinterpretation of seismic data, laboratory testing of rock samples, and static and dynamic reservoir modelling. Approximately 2,000 km² of subsurface area has already been assessed. These studies contribute to understanding reservoir behaviour, storage capacity, sealing integrity, and induced seismicity risks associated with CO₂ injection in deep saline aquifers.

Eastern Lights also places strong emphasis on monitoring technologies. Preparatory work is underway for advanced seismic monitoring systems based on Distributed Acoustic Sensing (DAS) using telecommunications optical fibres. Additionally, the project involves creating machine learning algorithms and

data-processing tools capable of handling large-scale monitoring datasets and improving microseismic event detection.

Beyond technical aspects, the project addresses environmental, economic, and societal dimensions of CCUS deployment. Life Cycle Assessment and techno-economic analyses are being developed to evaluate future transport and storage scenarios, while sociological surveys and stakeholder engagement activities support public awareness and acceptance of CO₂ storage technologies.

As one of the first integrated onshore CCUS initiatives in the region, Eastern Lights contributes to strengthening scientific knowledge, regulatory readiness, and industrial cooperation in Eastern Europe. By combining geological expertise, infrastructure planning, advanced monitoring, and cross-border collaboration, the project aims to create the foundation for future industrial-scale CO₂ storage and support Europe's transition toward climate neutrality.

Veronika Georgieva

Eastern Lights
coordinator
Holcim Bulgaria.



Figure 2. Project team at the 2nd project meeting, Montpellier, September 2025.

Transdisciplinary and deliberative equity appraisal of transition policies in energy and mobility (Acronym: TANDEM)

Europe is firmly committed to climate action, yet the transition to a low-carbon economy is not free from risks. Climate policies are increasingly recognised as a source of new social inequalities — affecting households differently depending on income, place of residence, type of housing or access to alternative technologies. The challenge is therefore not whether to act, but how to design policies that combine effective climate action with justice considerations.

The Horizon Europe **TANDEM** project — Transdisciplinary AND Deliberative equity appraisal of transition policies in Energy and Mobility (Grant Agreement No. 101069653) — was launched to address this challenge directly. Coordinated by Vrije Universiteit Brussel and implemented between September 2022 and August 2025, the project brought together seven partners from six countries, including the Mineral and Energy Economy Research Institute of the Polish Academy of Sciences (MEERI PAS), a member of ENeRG. The project had a total budget of EUR 3.1 million and was funded under the Horizon Europe Climate, Energy and Mobility cluster.

TANDEM developed a transdisciplinary methodology that allows policymakers to identify and analyse emerging inequalities of low-carbon transition policies, and



to co-design socially fair and effective alternative transition pathways together with citizens, public authorities, the private sector, and other stakeholders. The methodology combines art-based deliberative visioning, participatory system mapping, as well as assessment and appraisal methods, structured around a series of three deliberation panels with citizens. Within these panels, participants articulated their own visions of a just transition, defined criteria for evaluation, and proposed concrete interventions, which were then subject to systemic impact assessment.

The methodology was evaluated in five case studies addressing controversial transition policies in energy and mobility, affecting urban and rural populations:

- **Brussels (Belgium)**
the thermic ban on fossil-fuelled vehicles,
- **Innsbruck (Austria)**
housing inequalities and energy renovation,

- **South Ostrobothnia (Finland)**
the peat production phase-out,
- **Catalonia (Spain)**
solidarity in renewable energy production.
- **Krzywca (Poland)**
the coal phase-out in households.

The Polish case study was conducted by the MEERI PAS. In the rural municipality of Krzywca, the team examined how the phase-out of solid fuels used for home heating and cooling affects local residents — including households affected by energy poverty, owners of older detached houses, and groups with restricted access to funding for thermal modernisation. Through deliberation panels, residents collaboratively identified the conditions under which the heating transition might be perceived as fair, and formulated recommendations for local and national policy.

The final outputs of TANDEM include an analysis of the transition pathways co-designed in the case studies along with a set of policy principles addressed to local, national and EU decision-makers. The recommendations stress that effective just transition policies require the structured involvement of potentially affected groups already at the design stage, and that the diversity of vulnerabilities across European regions must be reflected in various policy instruments.

More information:

<https://tandem-heu.eu>
<https://cordis.europa.eu/project/id/101069653>

Aleksandra Komorowska,
Ph.D., D.Sc., Eng.

Head of the Division of Minerals and Energy Sustainable Development
Mineral and Energy Economy Research Institute of the Polish Academy of Sciences (MEERI PAS)



**Mineral and Energy
Economy Research
Institute**
Polish Academy of Sciences

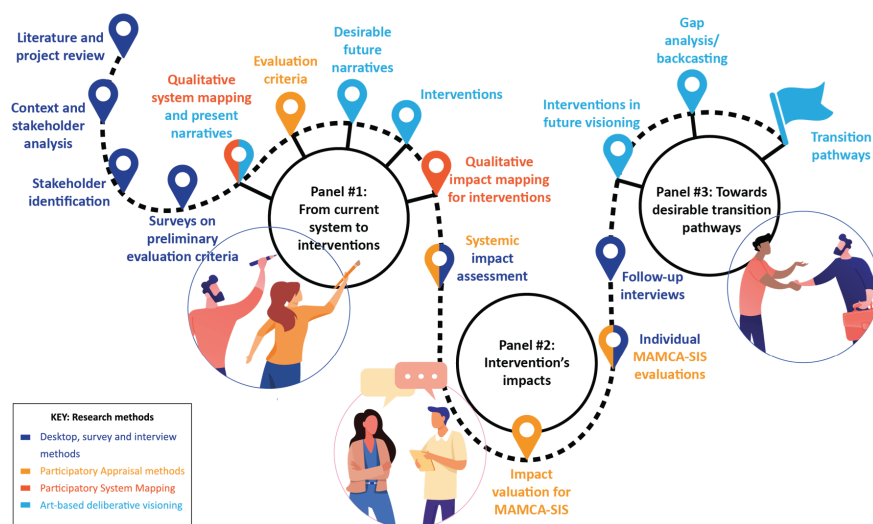


Figure 3. Research methods of TANDEM project.

ENeRG – European Network for Research in Geo-Energy

ENeRG – European Network for Research in Geo-Energy is an informal contact network open to all European organisations with a primary mission and objective to conduct basic and applied research and technological activities in the field of sustainable use of the underground for the energy transition.

ENeRG president is Elma Charalampidou, Associate Professor (PhD, MEng, FHEA), School of Energy, Geoscience, Infrastructure and Society, Institute for GeoEnergy Engineering, Heriot-Watt University, E.Charalampidou@hw.ac.uk

ENeRG secretariat is run by Centre for Research and Technology Hellas, Athens, Greece.

Contact person: Eleonora Manoukian, manoukian@certh.gr

ENeRG website: <https://www.energnet.eu> is maintained by SHOGenergy, Estonia. Contact person: Dr. Kazbulat Shogenov, kazbulat.shogenov@taltech.ee

ENeRG Newsletter - GEO ENeRGY is published by NGO "Geothermal Ukraine". Editor: Yuliia Demchuk, y.demchuk@geothermalukraine.org
Layout and computer typesetting: Magic Media Advertising SRL
contact@magic-media.ro

Language review: Elma Charalampidou, Heriot-Watt University, E.Charalampidou@hw.ac.uk

Copyright © All rights reserved / ENeRG

BASRECCS Student Activities and Baltic Carbon Forum 2026

This year, the BASRECCS Network is organising three major events focused on Carbon Capture, Utilisation and Storage (CCUS), geothermal energy, hydrogen, and energy transition technologies in the Baltic Sea Region.

The Annual Baltic Carbon Forum 2026 (BCF 2026) will take place in Warsaw, Poland, on the 8th–9th of October 2026 in Radisson collection hotel, Warsaw, Poland. **A Student Hackathon** will be organized in KTU-MLAB, Kaunas Lithuania, on the 11th–12th of September, followed by a **Student Workshop** on Geo-Energy topics in Corner Hotel, Vilnius, Lithuania, on the 18th of September.

The Baltic Carbon Forum 2026 aims to bring together policymakers, industry representatives, researchers and NGOs to discuss ongoing developments, exchange knowledge and experiences, and foster collaborations related to large-scale CCUS deployment in the Baltic Sea Region and beyond.

The conference is expected to attract a significantly larger international audience compared to previous years and will include technical sessions, panel discussions, networking opportunities, and presentations from leading experts in carbon-neutral technologies.

The BASRECCS student activities organised in Lithuania aim to strengthen youth engagement and awareness regarding climate technologies and the energy transition.



The Student Hackathon in Kaunas will provide students and young researchers with an opportunity for team work on real-world challenges related to CCUS, carbon neutrality, and sustainable energy solutions.

The Student Workshop in Vilnius will focus on the latest scientific and industrial developments in CCUS, geothermal energy, hydrogen technologies, and subsurface energy storage. The workshop will feature keynote talks, presentations from researchers and industry experts, panel discussions, and networking opportunities for students and early-career researchers.

Further details regarding registration, programme updates, sponsorship opportunities, and student participation are available

on the official BCF 2026 website <https://bcforum.net/>.

Students are especially encouraged to participate and present their work. A limited number of travel grants and student support opportunities may be available for early registrants.

BCF 2026 Registration will close on 1st September 2026.

Please use the discount code BCF 2026 for hotel bookings, available on registration page.

Mayur Pal,
BASRECCS Chairman

Alla Shogenova,
BASRECCS
Board member



Sponsors:



ENeRG members

**Armenian National Academy of Sciences (IGS),
Institute of Geological Sciences (Armenia)**
Khachatur Meliksetian
km@geology.am

Sofia University (Bulgaria)
Prof. Georgi V. Georgiev
gigeor@abv.bg

University of Zagreb (Croatia)
Prof. Bruno Satic
bruno.satic@rgn.hr

Croatian Geological Survey (Croatia)
Dr. Staša Borovic
sborovic@hgi-cgs.hr

**The Institute of Geophysics of the
Czech Academy of Sciences (Czech Republic)**
Dr. Jan Mrlina
jan@ig.cas.cz

**GEUS - Geological Survey of Denmark and Greenland
(Denmark)**
Mette Olivarius
mol@geus.dk

**Department of Geology, Tallinn
University of Technology (Estonia)**
Dr. Alla Shogenova
alla.shogenova@taltech.ee

SHOGenergy (Estonia)
Dr. Kazbulat Shogenov
Kazbulat.Shogenov@taltech.ee

CERTH (Greece)
Dr. Nikolaos Koukoulas
koukoulas@certh.gr

Hellenic Hydrocarbon Resources Management S.A. (Greece)
Dr. Aristofanis Stefatos
a.stefatos@greekhydrocarbons.gr

**OGS - National Institute of Oceanography and Applied
Geophysics (Italy)**
Barbara Merson
bmerson@ogs.it

Ceri Research Centre - Sapienza University of Rome (Italy)
Sabina Bigi
sabina.bigi@uniroma1.it

Nature Research Centre (Lithuania)
Prof. Saulius Sliapura
sliapura@geo.lt

Institute of Geology and Seismology (Moldova)
Dr. Igor Nicoara
nicoaraigor@gmail.com

Polish Geological Institute (Poland)
Dr. Monika Konieczńska
mkon@pgi.gov.pl

MEERI PAS (Poland)
Prof. Radosław Tarkowski
tarkowski@min-pan.krakow.pl

**AGH University of Technology and Science
(Poland)**
Barbara Uliasz-Misiak
uliasz@agh.edu.pl

**National Institute for Marine Geology and
Geoeology-GeoEcoMar (Romania)**
Dr. Constantin S. Sava
savac@geoecomar.ro

**Middle East Technical University, Petroleum
Research Center (Turkey)**
Assoc. Prof. Dr. Ismail Durgut
durgut@metu.edu.tr

NGO "Geothermal Ukraine"
Yulia Demchuk
y.demchuk@geothermalukraine.org

Heriot-Watt University (UK)
Dr. Elma Charalampidou
E.Charalampidou@hw.ac.uk