



6th

International Workshop on Offshore Geologic CO₂ Storage

13-14 September 2023

STOREGDA



International Workshop on
Offshore Geologic CO₂ Storage



UNIVERSITY OF
ABERDEEN

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About the workshop

The International Workshop on Offshore Geologic CO₂ Storage series began in 2016 as a collaboration between the Bureau of Economic Geology's Gulf Coast Carbon Center and IEAGHG. The workshop was conceived in response to a Carbon Sequestration Leadership Forum (CSLF) Task Force report, led by the United States, on technical barriers and R&D opportunities for offshore CO₂ storage, which called for international knowledge sharing through workshops and international collaborative projects. The main objective of the series is for countries that want to do offshore storage to learn from those who are

doing it. The series has grown in popularity over the years as more countries look towards the vast storage potential found in the deep geologic formations of the offshore.

Our thanks go to Storegga for their sponsorship of this edition in Aberdeen, and to the University of Aberdeen for hosting.

Co-chairs of workshop

Tim Dixon,
IEAGHG

Katherine Romanak,
Gulf Coast Carbon Centre

About the University of Aberdeen

Founded in 1495, the University of Aberdeen is Scotland's third oldest university and the fifth oldest in the UK. It is a community of more than 130 nationalities, with 14,000 students and 3,600 staff.

Established to serve the north-east of Scotland, today our university is a global presence in higher education. A dual focus on our region and the wider world is as important to us today as it was five centuries ago.

The University is committed to four key areas which guide our present work and future direction.

- **Inclusive** – we value diversity
- **Interdisciplinary** – we learn together
- **International** – we think across borders
- **Sustainable** – we work responsibly

The Centre for Energy Transition

Our integrated centers bring together academics from across the University to work on key global challenges. For more than 40 years experts at the University of Aberdeen have been combining our academic excellence with industry expertise to innovate and make positive change for the future of global energy.

Alongside our research, the University of Aberdeen offers a wide range of courses aimed at the Energy Transition, including the world's first and only Masters degree in decommissioning oil rigs, platforms and offshore structures. With different study options available, including online study and short courses, why not browse our energy courses and see how we can prepare you for a career in Energy Transition.

Energy Masters Programme

**Masters Programmes | Research |
The University of Aberdeen (abdn.ac.uk)**

Online Learning

**Energy Courses - Online Degrees and Short
Courses | University of Aberdeen |
UK (abdn.ac.uk)**

Continual Professional Development

**CPD Programmes | Research |
The University of Aberdeen (abdn.ac.uk)**



Just Transition Lab

The Just Transition Lab is a cross School research group involving the School of Geosciences, School of Law, School of Social Sciences and the Business School working on advancing interdisciplinary impact-driven research on Just Transition. Based in Aberdeen, the Lab researchers work at the forefront of Just Transition challenges, employing action and participatory research to facilitate insightful policy analysis and engagement with key stakeholders.

School of Geosciences

Our diverse community of academics and students is united by a common interest in the Earth – its past, present and future – and how we as humans interact with the planet we inhabit. Research ranges across the social and natural sciences, addressing topics such as: future energy options, development of digital societies, catastrophic natural processes, hydrology and drainage evolution and human impacts on the natural environment. Much of our ground-breaking research is encompassed with the Centre for Energy Transition and the Just Transition Lab, in areas such as geothermal energy, carbon capture and storage, nuclear waste storage and critical materials for the energy transition.

**OUR BEST CHANCE
TO ACT WAS A
GENERATION AGO**

**OUR SECOND BEST
CHANCE IS NOW**

STOREGGA

Storegga is an independent developer of low-carbon solutions including industrial carbon capture, storage and hydrogen.

Our founders were integral to the earliest work on carbon capture and storage in the UK.

Since 2007 we have been leveraging experience from the offshore oil and gas sector to screen, identify and develop geological storage for industrial carbon dioxide (CO₂) emissions.



CO₂ storage



**Pipeline
transportation**



**Shipped
transportation**



Hydrogen

STOREGGA.EARTH

Programme

WEDNESDAY 13 SEPTEMBER		
Time	Session	
09.00	Arrival & Tea & Coffee	
09.30	Session 1 - Welcome & Scene Setting	
09.30	Welcome from Prof Nick Forsyth, Vice Principal Research, University of Aberdeen Welcome from Steve Murphy, Chief Commercial Officer, Storegga	
09.40	Welcome from Tim Dixon, IEAGHG & Katherine Romanak, University of Texas at Austin	
09.50	Scene setting from Owain Tucker, Shell	
10.00	Session 2 - Project Roundups Session Chairs: Tim Dixon, IEAGHG & Clare Bond, University of Aberdeen	
10.00	Acorn, UK	Iain Morrison, Storegga
10.05	Prinos, Greece	Katrina Sardi, Energean
10.10	Corpus Christi, USA	Tip Meckel, University of Texas
10.15	Viking CCS, UK	Andrew Hood / Johnathan Murray – Harbour Energy
10.20	Pilot Strategy, Portugal	Helena Caeiro - University of Évora
10.25	Northern Lights	Catalina Acuna, Northern Lights
10.30	South Korea	Axel Lemus, CCUS
10.35	Porthos, Netherlands	Kike Beintema, EBN
10.40	Liverpool Bay CCS, UK & Ravenna CCUS project, Italy	Manotti Matteo - ENI
10.45	Project Greensand, Denmark	Søren Reinhold Poulsen - INEOS
10.50	Deep C Store, Australia	Daein Cha – Deep C Store
11.00	Coffee Break	
11.20	Taiwan	Cheryl Yang - ITRI
11.25	Poseidon	Nick Terrell, Carbon Catalyst
11.30	Gulf of Mexico, USA	Rahul Umrani, Talos Energy
11.35	Petrobras, Brasil	Ana Paula Musse, Petrobras
11.40	Pelican project, Australia	Victoria Fitzgerald, Victoria State Government
11.45	Enping, China	Liwei Zhang, Chinese Academy of Science
11.50	Timor Leste	Francelino Antonio Xavier, ANPM
11.55	Discussion	

12.25	Lunch	
13.15	Session 3 - Injection & Wells Chair - Katherine Romanak, University of Texas at Austin	
13.15	Capacity/pressure space – Gulf of Mexico	Alex Bump, University of Texas
13.30	100 sq miles question – is that the right size?	Tip Meckel, University of Texas
13.45	Managing our well stock	Owain Tucker & Nicola Clarke
14.00	Discussion	
14.30	Comfort Break	
14.45	Session 4 - Legal, Regulatory & Accounting Chair - Paulo Seabra	
14.45	Delivering Carbon Storage on the UK Continental Shelf – The NSTA's role in regulating and stewarding activity at pace and scale	Matthew Farris, North Sea Transition Authority
15.00	Update from ISO WG3-27914	Simon O'Brien, Shell
15.15	Transport of CO ₂ for Offshore Storage under the London Protocol	Tim Dixon, IEAGHG
15.30	Implications of the Net Zero Industry Act for CO ₂ storage development in the EU	Toby Lockwood, CATF
15.45	Recent Advancements in the Carbon Capture and Storage (CCS) Regulatory Framework in Brazil: Progress and Prospects	Isabela Morbach, CCS Brasil
16.00	Discussion	
16.15	Coffee Break	
16.30	Session 5 - Interaction with other users of the seabed Chair - Lizzie Whiteley, Storegga	
16.30	Windfarms and hybrid uses	John Underhill, University of Aberdeen
16.45	The role of CCS in an integrated energy system at the North Sea	Joris Koornneef, TNO
17.00	Discussion	
17.30	Close	

7pm – Arrival Drinks at Chester Hotel, Queen’s Road, Aberdeen

7.30pm - Dinner

THURSDAY 14 SEPTEMBER		
08.30	Arrival & Tea & Coffee	
09.00	Session 6 - Transport & Infrastructure Chair – Owain Tucker, Shell	
09.00	Development and operation of CCS pipeline network	Stefan Belfroid, TNO
09.15	CO ₂ Shipping Developments	Ajay Edakkara, Shell
09.30	Qualitative Well Integrity Risk Assessment for Carbon Storage in the Gulf of Mexico Depleted Fields	Brigitte Petras, Battelle
09.45	Practical Approaches to CO ₂ Subsurface Storage Risk Assessment	Andy Lidstone, Risktec
10.00	Discussion	
10.30	Coffee Break	
11.00	Session 7 - Stakeholder Engagement Chair – Tim Dixon, IEAGHG	
11.15	Stakeholder views on offshore monitoring in the Gulf of Mexico	Katherine Romanak, University of Texas at Austin
11.30	Key determinants of public reactions to CCS in the UK: What shapes acceptance?	Darrick Evensen, University of Edinburgh
11.45	Stakeholder Engagement and a Just Transition - What is required of CCS?	Tavis Potts, University of Aberdeen
12.00	Discussion	
12.30	Lunch	
13.30	Session 8 – Monitoring Chair – Simon O’Brien, Shell	
13.30	Greensand Monitoring Research	Andreas Szabados, Wintershall DEA
13.45	DAS at seabed for Passive Seismic Monitoring: Application to CO ₂ Storage	Estelle Rebel, Total Energies
14.00	Acorn – Measurement, Monitoring and Verification Planning	Gwilym Lynn, Shell
14.15	The Northern Lights CO ₂ transport and storage company: how we built a robust monitoring and response plan	Catalina Acuna, Northern Lights
14.30	Discussion	
15.00	Coffee Break	

15.30	Session 9 - Environmental Aspects Chair – Nicola Clarke	
15.30	DOE's Stakeholder Engagement Efforts in the Wake of the U.S. Bipartisan Infrastructure Law's \$12 Billion Investment in Carbon Management	Mary-Ellen Kwong, US Department of Energy
15.45	Environmental monitoring strategies developed through controlled release experiments	Marius Dewar, STEM-CCS
16.00	Potential environmental impacts from offshore CO ₂ storage in the UK	Paul Wood, Shell
16.15	Considerations for new seismic data acquisition supporting CCS in the Gulf of Mexico	Katherine Romanak, University of Texas at Austin
16.30	Environmental monitoring of offshore carbon storage – experience from ACT4storage and outlook for Smart AUVs”	Ann Blomberg, NGI
16.45	Discussion	
17:00	Summary & Recommendations	Tim Dixon, Katherine Romanak, Nikki Clarke
17.30	Close	



KING'S COLLEGE CAMPUS

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|--|--|
| A King's College | K MacRobert Building |
| B University Office | L Meston Building |
| C Regent Building | M Aberdeen Sports Village/Aquatics Centre |
| D Sir Duncan Rice Library | N Taylor Building |
| E The Student Union Building | O Edward Wright Building |
| F Cruickshank Botanical Gardens | P William Guild Building |
| G St. Mary's Building | Q Old Brewery |
| H The Old Town House | R New King's |
| I Fraser Noble Building | S 50/52 College Bounds |
| J Zoology Building | T Science Teaching Hub |