International Workshop on Offshore Geologic CO_2 Storage

5th International Workshop

19-20 May 2022

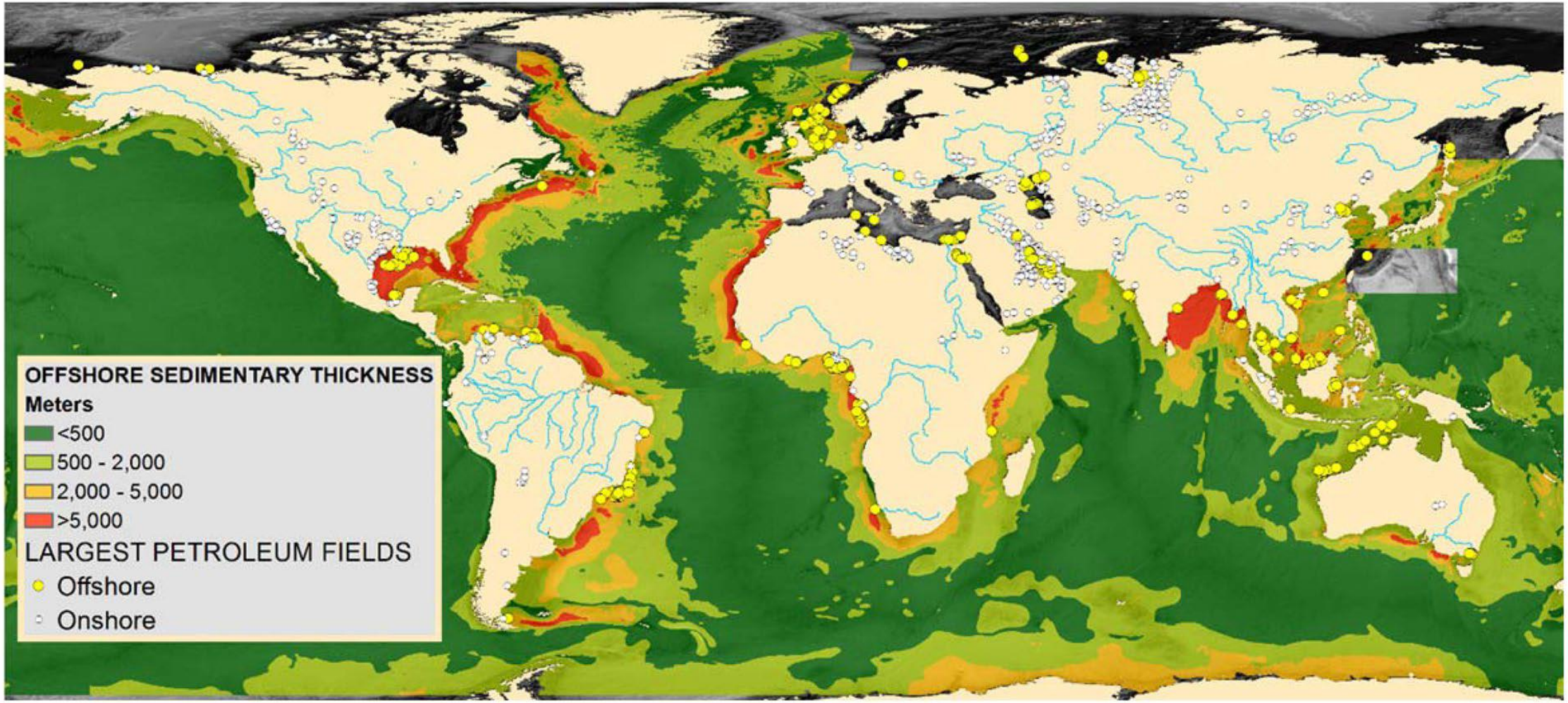
New Orleans

GCCC Gulf Coast Carbon Center

ieaghg

carbon sequestration leadership forum

The global offshore continental shelves represent the largest near-term storage for Gigaton-scale CCS



Ringrose and Meckel, Nature 2019

CSLF Report on Offshore Geologic CO_2 Storage

"There is a growing wealth of research, development and practical experiences that are relevant to CO_2 storage offshore, but this expertise is familiar only to a few specific countries around the world. However there is also significant global potential for offshore CO_2 storage, and countries who are not yet active but may become interested in offshore storage, would benefit from knowledge sharing from these existing experiences and expertise. Such international knowledge sharing would be facilitated by international workshops and by international collaborative projects."

(CSLF Ministerial Nov 2015: CSLF-T-2015-06)

Workshop Series

International Workshop on Offshore Geologic CO_2 Storage

- **1st Workshop,19-21 April 2016, at the BEG, University of Texas, Austin.** 50+ attendees from 13 countries.
  - Organized by the Bureau of Economic Geology (BEG) at the University of Texas at Austin in collaboration with the South African Center for CCS at SANEDI, IEAGHG, and with support from CSLF and UNFCCC's CTCN.
  - To facilitate sharing of knowledge and experiences among those who are doing offshore storage and those who may be interested.
  - **IEAGHG Report 2016-TR2**

- **2nd Workshop 19-20 June 2017, at Lamar University Beaumont, Texas**. 50+ attendees from 9 countries
  - To address and build on the recommendations and topics raised at the first workshop to take offshore storage forward. Continuing the theme of 'how to do'
  - **IEAGHG Report 2017-TR12**

3rd Workshop

International Workshop on Offshore Geologic CO_2 Storage

Hosted by Research Council of Norway, Oslo, 3-4 May 2018

Aim: To address and build-on the recommendations and topics raised at the first two workshops to take offshore storage forward. Continuing theme of 'how to do'.

Scope:

- How to learn from learnings?
- Value Chains for Offshore
- Infrastructure (re-use)
- Monitoring offshore CO2 storage/EOR
- Offshore CO2 storage resource assessment
- Project updates
- Standards and Regulatory Frameworks
- Brainstorming towards an international collaborative project

IEAGHG Report 2018-TR02

Recommendations from 3rd Workshop

- Explore models for international collaboration project
- Eg An ACT good for R&D (US joining), so an ACT for projects
- Joint funding between countries has started and should continue
- Consider how to build knowledge sharing from hands-on operational projects , including international collaboration project
- Provide a roadmap to existing info sources
- Complimentary monitoring to be build into MVA plans - different monitoring methods informing each other, including trigger methods
- To survey which Developing Countries would be attracted to offshore storage
- Getting Developing Countries to these meetings. Identify key persons.
- More advocacy to funders on CCS – future NDCs will need CCS, how to make countries aware of their potential. Research community is ready to inform.

4th Workshop

International Workshop on Offshore Geologic CO_2 Storage

Hosted by University of Bergen, Norway, Feb 2020

Aim: To address and build-on the recommendations and topics raised at the first three workshops to take offshore storage forward. Continuing theme of 'how to do'. 150 attendees. IEAGHG Report 2020-TR02

Scope:

- Infrastructure
- Deep Subsurface Monitoring and modelling offshore CO_2 storage
- Regulatory Frameworks
- Project updates
- Emerging CCS country needs and progress
- Brainstorming towards an international collaborative project

- *With alternate sessions from* STEMM-CCS

Recommendations from 4th Workshop

- Continue information sharing, such as with these workshops, the exchange of experiences, and getting more developing countries to these meetings.
- Regulatory authorities should consider re-use of infrastructure before requiring decommissioning.
- There is great potential for offshore CCS, and a need to communicate this to governments and other stakeholders.
- As Nationally Determined Contributions (NDCs) under the Paris Agreement get updated, more countries will need to include CCS. So it's important to make countries aware of their own potential for offshore CO_2 storage, or potential for export to neighbouring countries with offshore CO_2 storage.
- The CCS community would benefit from having offshore sites to practice and learn from, e.g. a well or a fault in an existing field that can be tested and investigated, similar to an offshore equivalent of CAMI site in Alberta.
- More knowledge is needed of the role of the overburden in retaining stored CO_2
- Projects should consider oversizing transport to accommodate addition of CO_2 sources over time.

Steering Committee

- Tim Dixon, IEAGHG (Chair)
- Katherine Romanak, BEG (Co-chair)
- Susan Hovorka, BEG (Host)
- Tip Meckel, BEG
- Sveinung Hagen, Equinor
- Filip Neele, TNO
- Noel Kamrajh, Council for GeoScience, South Africa
- Paulo Negrais Seabra- Independent Consultant (formerly Petrobras)
- Ryozo Tanaka, RITE
- Owain Tucker, Shell
- John Litynski, US DOE
- Doug Connelly, NOC
- Alex Bump, BEG
- Charles Jenkins, CSIRO
- Sam Neades, IEAGHG