

Basin Scale Issues for Carbon Storage

Joint Department of Energy – Department of Interior Technical Workshop

February 13th & 14th, 2024

Main Auditorium, USGS National Center

12201 Sunrise Valley Drive

Reston, VA

Day 1 (February 13, 2024)

7:30 am – 8:15 am **Registration, Security check-in, Refreshments**

8:15 am – 8:25 am **Welcome**

David Applegate, Director, United States Geological Survey

Amanda Raddatz, Division Director, Fossil Energy Carbon Management, Department of Energy

8:25 am – 8:40 am **Workshop Objectives**

Rajesh Pawar, Fossil Energy Carbon Management, Department of Energy

Sean Brennan, United States Geological Survey

8:40 am – 10:20 am **Session 1: Basin-scale effects**

- Presentations identifying issues/current state of the art (10 minutes each)
 - Jens Birkholzer – Lawrence Berkeley National Laboratory
 - Volker Oye – NORSAR
 - Robert Dilmore – National Energy Technology Laboratory
- Facilitated discussion in breakouts (40 minutes)
 - What are the required data? What are the key knowledge/data gaps? What tools/models can be useful?
 - Report out/ follow-on discussion - 30 minutes

10:20 am – 10:35 am **Break**

10:35 am – 12:05 pm **Session 2: Project siting considerations (onshore/offshore)**

- Presentations identifying issues (10 minutes each)
 - Tara Righetti, University of Wyoming



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- Melissa Batum, Bureau of Ocean Energy Management
- Facilitated discussion in breakouts (40 minutes)
 - What are the major technical issues? What are the data needs? What types of models/tools can be useful?
 - Report out/follow-on discussion – 30 minutes

12:05 pm – 1:30 pm Lunch (on your own)

1:30 pm – 3:00 pm Session 3: Effective basin management for different types of basins

- Presentations identifying issues (10 minutes each)
 - Randy Locke, Illinois State Geological Survey
 - Sue Hovorka, Bureau of Economic Geology
- Facilitated discussion in breakouts (40 minutes)
 - What are major issues? What are required data? What are knowledge/data gaps? What types of models/tools can be useful?
 - Report out/follow-on discussion – 30 minutes

3:00 pm – 3:15 pm Break

3:15 pm – 4:15 pm Session 4: Industry perspectives on basin-management issues

- Presentations identifying issues (10 minutes each)
 - Chris Walker, BP
 - Robin Ozah, Talos Energy
 - Joseph Jephson, Carbon Terravault
- Facilitated discussion (30 minutes)
 - What are major issues? What are major data needs? What types of models/tools can be useful?

4:15 pm – 4:30 pm Day 1 Recap

Day 2 (February 14, 2024)

7:45 am – 8:30 am Security Check-in, Refreshments

8:30 am – 8:45 am Day 2 Overview

8:45 am – 10:15 am Session 5: Regulatory aspects/Safe management (onshore/offshore)

- Presentations identifying issues (10 minutes each)
 - Onshore – Molly McEvoy, US Environmental Protection Agency
 - Offshore – Stacey Noem, Bureau of Safety and Environmental Enforcement



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- Facilitated discussion in breakouts (40 minutes)
 - What are the major data needs? What types of models/tools can be useful?
 - Report out/follow-on discussion – 30 minutes

10:15 am – 10:30 am Break

10:30 am – 12:00 pm Session 6: Characterization of conventional/unconventional resources to reduce data scarcity and uncertainty

- Presentations identifying current status and needs (10 minutes each)
 - Peter Warwick, United States Geological Survey
 - Jessica Moore, American Association of State Geologists
- Facilitated discussion in breakouts (40 minutes)
 - What data are required? What are major data gaps? How should data collection efforts be prioritized (which data and where)?
 - Report out/follow-on discussion – 30 minutes

12:00 pm – 1:30 pm Lunch (on your own)

1:30 pm – 3:00 pm Session 7: Multi-resource related opportunities

- Presentations identifying issues (10 minutes each)
 - Matthew Merrill, United States Geological Survey
 - Julien Caubel, Office of the DOE Under Secretary for Science & Innovation
- Facilitated discussion in breakouts (40 minutes)
 - What are synergy opportunities? What are major data needs?
 - Report out/follow-on discussion – 30 minutes

3:00 pm – 3:15 pm Break

3:15 pm – 4:45 pm Session 8: Data sharing approaches/platforms

- Presentations identifying issues (10 minutes each)
 - Kelly Rose, National Energy Technology Laboratory
 - Sean Brennan, United States Geological Survey
- Facilitated discussion in breakouts (40 minutes)
 - What types of tools/approaches can facilitate effective data sharing?
 - Report out/follow-on discussion – 30 minutes

4:45 pm – 5:15 pm Recap and Adjourn



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