Overview – Capture R&D

Duty (paraphrased)

*Develop recommendations for relevant Federal agencies on **how to develop and research technologies** that can capture carbon dioxide and would be able to be deployed within the region covered by the task forces*

Progress to Date

- Convened a subset of volunteer members to begin working
- Compiled information from resources such as the NETL/DOE R&D Compendium and GAO's review of CCUS R&D programs
- Compared experiences with numerous federal R&D funding opportunities and analyzed the similarities and differences
- Identified major themes and topics for future discussion

Example Framework Criteria

	• TRL
	• Cost • High Capture Efficiency • Energy Efficiency
	• Water, Chemical, Refrigerant Use • Environmental Emission Concerns • Co-Pollutant Capture
	• Durability/Robustness • Integration/Impact to Plant • Modular Scalability

The group has identified the following themes which future recommendations will seek to address:

- **Acceleration of progression from lab → full deployment**
- **Ensuring diversity of tech and ecosystem**
- **Promoting community engagement and environmental equity and justice through R&D**

Next Steps

- Solicit input from participants
- Meet with DOE to discuss R&D priorities
- Confirm themes and draft recommendations for review and input

Recommended Deliverable: Roadmap Format

Input and Feedback Request

R&D Strategies

- Experiences in applying for funding and the qualification criteria
  - Technological qualification
  - Company qualification
  - What's working well? What could be improved?
- Strategies to accelerate pilot success → (more) guaranteed scale-up funding
  - How ensure a smooth "conveyor belt" with appropriate down-selects
  - E.g., Matched exit/entry criteria
  - Consider in context of funding pools (VC vs. infra)
  - What testing centers are needed for scale-up?

Specific R&D Priorities

- Specific perspectives sought:
  - Communities and stakeholders
  - Technology developers
  - Project developers
- Input sought
  - Items of *concern*
  - Items of *hope*
  - How is capture being addressed with communities, and what is the feedback? Does this identify gaps in knowledge/education, or gaps in R&D?
  - What are *emerging* issues that could be addressed through R&D?
- Input on R&D capture tech themes
- Input on trade-offs of criteria and R&D priorities
  - How do developers prioritize across criteria?
  - How to balance or navigate competing community/stakeholder priorities?
    - Examples?