

Next Generation Technology Development/RDD&D Work Group: Background Summary

Prior Coalition Consensus Positions

- Carbon capture, removal, reuse, transport, and storage projects and associated infrastructure must be deployed quickly to meet mid-century climate goals.
 - Meeting these midcentury targets, however, requires sustained and increased investment and information sharing to scale up carbon management technologies and enable deployment in a coordinated fashion.
 - Recent historic bipartisan investments of \$12 billion in RDD&D of carbon management technologies ensure that federal funding and incentives for these technologies more closely align with funding levels that other emissions-reducing technologies have historically benefitted from.
 - The US will need to continue increasing RDD&D investments in carbon management technologies to achieve commercial deployment levels.

- Build upon momentum provided by federal demonstration programs
 - Continued support from the federal government to the Office of Clean Energy Demonstrations (OCED) will be an integral part of demonstrating less commercially mature carbon management technologies.
 - There will be additional needs beyond initial investments provided by the Bipartisan Infrastructure Law, particularly to demonstrate carbon capture technologies in heavy industry sectors, including cement, steel, refining, and others.

- Continue to scale federal funding for core carbon management activities
 - The Bipartisan Infrastructure Law, coupled with regular year-over-year increases to annual RDD&D funding for relevant activities at DOE, provides the building blocks for establishing an even more ambitious level of federal support that is necessary to commercialize a sufficiently broad portfolio of emissions reduction technologies.
 - Sustained federal investment in less commercially mature and transformational carbon capture, removal, reuse, and storage technologies and processes will provide needed continuity in federal programming and remain a critical component of driving down costs.

- Ensure the rapid scale-up of the carbon management industry
 - Currently, project developers are restricted from receiving both a federal grant and a loan from the DOE-administered Loan Program Office and this restriction ultimately hinders the rapid development and deployment of

carbon management technologies. Congress should remove this restriction so that DOE can support the rapid development of the full value chain of carbon management technologies.

- While there has been successful commercial demonstration of carbon management technologies at power plants and in certain industrial sectors, the proprietary nature of capture technologies has limited the knowledge transfer between project operators and external stakeholders.
 - To scale the industry at the rate required by 2030, DOE should require that project developers use common specifications and generic technology solutions for capture retrofits for federally cost-shared pilots and demonstrations.
- Ensure federal funding is timely, transparent, and in keeping with congressional intent
 - Following the enactment of the Bipartisan Infrastructure Law, DOE and EPA now have a robust set of federal policy tools to advance the RDD&D of carbon management technologies to achieve economywide decarbonization.
 - The increased investment and ambition provided by the Bipartisan Infrastructure Law is central to ensure that carbon management technologies fulfill their key and complementary role in helping to reach midcentury climate goals.
 - The Coalition looks forward to continuing to work with DOE and EPA to ensure that implementation of these programs is timely, transparent, and consistent with legislative intent, and that agencies have appropriate capacity to properly staff these programs.

Framing Questions for Discussion

- What are the ongoing implementation needs for BIL funding?
- Over the next two years, what are some of our highest priorities for the annual appropriations process?
- What sectors require additional federal investments beyond what is allocated through BIL?
 - What types of investments (large-scale demos, pilot-scale, FEED, etc.)
- If we have a Republican administration or Republican control of House/Senate, what are the highest priorities for defense among BIL funds?
- What areas of federal funding have been oversubscribed and where is there a lack of interest? Are there priorities we can express to Congress to ensure allocated resources are used for carbon management technologies?
 - Example: CarbonSAFE is oversubscribed, low/no interest in CIFIA.

New Topics for Discussion

- DOE has claimed they lack authority to engage with developers during the Life Cycle Analysis (LCA) stage of a project application because it is only IRS' partner in administering 45Q designation – can/should this be changed to increase expediency in LCA submissions?
 - What appropriations would be needed for DOE to provide technical assistance?

Sources

- [IIJA Roadmap Factsheet](#)
- CCC FY2025 Appropriations Request: [Senate Letter](#)
- CCC FY2025 Appropriations Request: [House Letter](#)
- [FY2024 Appropriations Minibus](#)
- [CCC FY2025 Appropriations One-Pager](#)
- [CCC IIJA Implementation](#)
- [CCC Response to RFI: Responsible Carbon Management Initiative](#)
- [CCC Response to RFI: Mid-Scale DAC Demonstration Facility](#)