

Scoping Meetings for the Project Cypress Direct Air Capture Hub Environmental Impact Statement (EIS), Calcasieu Parish and Caddo Parish, LA

November 20 & 21, 2024

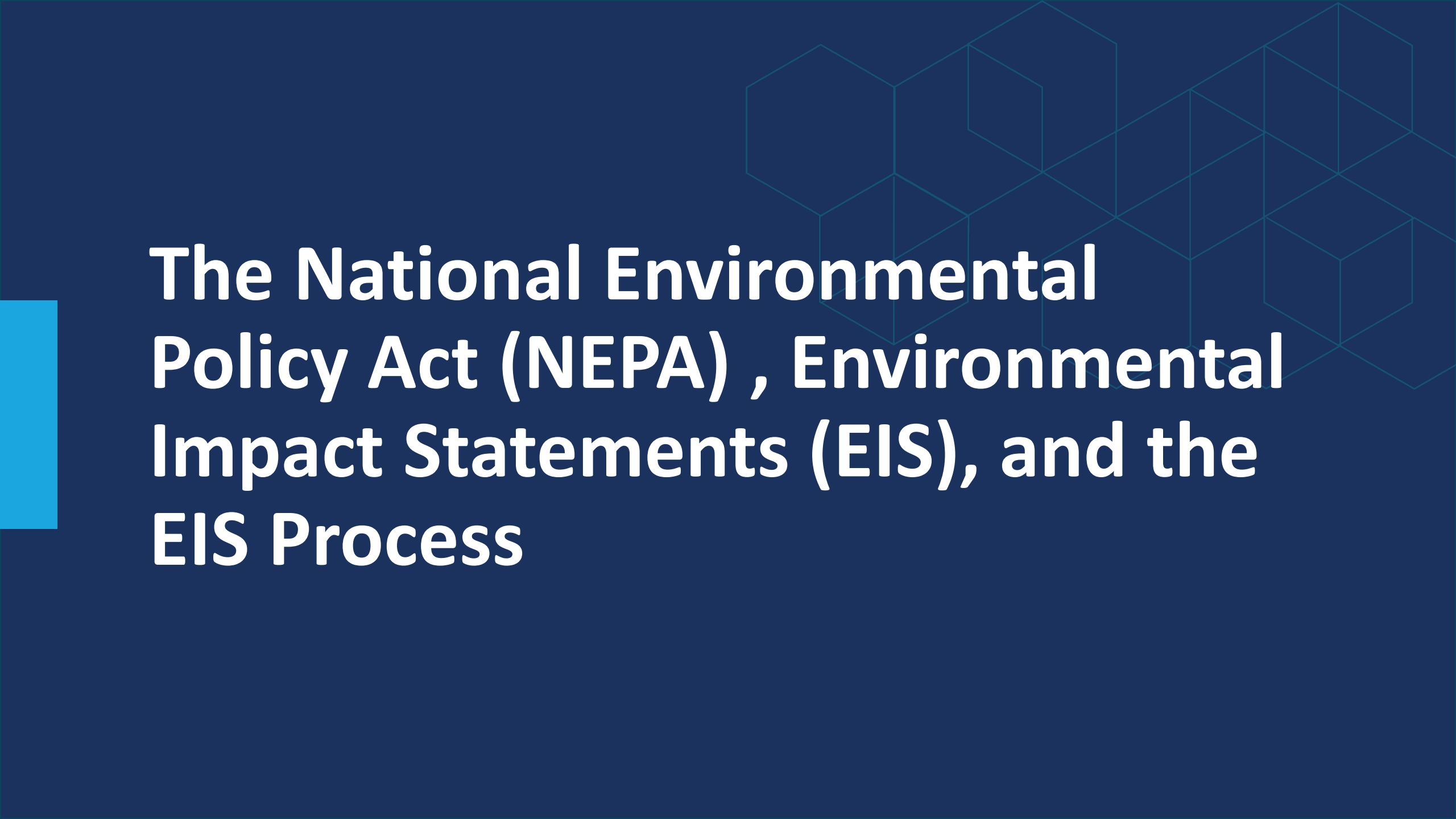
5:00-8:00 pm



Presentation Overview

- Overview of the National Environmental Policy Act (NEPA), Environmental Impact Statements (EIS), and the EIS Process
- Purpose of NEPA Scoping Meetings
- DOE's Purpose and Need
- DOE's Proposed Action and Proposed Project
- Scoping Comments





The National Environmental Policy Act (NEPA) , Environmental Impact Statements (EIS), and the EIS Process

The National Environmental Policy Act (NEPA)



NEPA is the national charter for protection of the environment



Requires the federal government to **evaluate** and **understand** potential environmental effects of a proposed project



Results in **informed** decision making



Environmental Impact Statements (EIS)

An EIS is prepared for proposed actions that may have significant effects on the environment. An EIS includes:

- The Purpose and Need for agency action
- The Proposed Action, Action Alternatives, and the No Action Alternative
- Description of the existing environment
- Evaluation of potential direct, indirect, and cumulative environmental effects
- Identification of mitigation measures, if applicable

DOE is preparing an EIS to evaluate the potential environmental effects associated with the proposed action of providing financial assistance in support of portions of the Project Cypress Direct Air Capture Hub.



The EIS Process

- Informs DOE decision-makers and the public about the environmental effects of the proposed action and alternatives
- Designed to obtain public input and provide multiple opportunities for comment
 - Scoping meetings and public hearings
 - Minimum 30-day comment period during scoping
 - Minimum 45-day comment period on draft EIS
- DOE's selection of an alternative is announced in a Record of Decision (ROD)





Purpose of NEPA Scoping Meetings

Purpose of NEPA Scoping Meetings

- Provide the public with information regarding:
 - ✓ DOE's proposed action and alternatives
 - ✓ The resource areas DOE anticipates analyzing in the EIS
- Describe the NEPA process
- Receive public input on the scope of the EIS





Purpose and Need

DOE's Purpose and Need

- DOE's purpose and need for agency action is to carry out Section 40308 of the Bipartisan Infrastructure Law (BIL) (42 U.S.C.A. § 16298d).
- BIL requires that DOE establish a research, development and demonstration program to test, validate or improve technologies and strategies to remove carbon dioxide from the atmosphere on large scale (i.e., "direct air capture" or "DAC").
- The Proposed Action would fulfill DOE's goals of accelerating the deployment of these technologies and enabling greater investments from the private sector and the promotion of substantial U.S. manufacturing of numerous DAC-related technologies.





DOE's Proposed Action and the Proposed Project

DOE's Proposed Action

- DOE's Proposed Action is to authorize the expenditure of federal funds to design, construct, operate, and maintain portions of the Project Cypress DAC Hub (Project Cypress) in western Louisiana.
- Project Cypress (the Proposed Project) would be comprised of:
 - Cypress Southwest - located in Calcasieu Parish near Vinton, LA
 - Cypress Northwest - located in Caddo Parish near Shreveport, LA

DOE's Proposed Action **does not** include funding for the CO₂ delivery and geologic storage infrastructure that would be part of the Proposed Project.



The Proposed Project: Project Partners



BATTELLE

Battelle Memorial Institute (Battelle) - Prime Recipient of the DOE financial assistance agreement with technology providers as Sub-recipients.



climeworks

Climeworks Corporation (Climeworks) – Technology provider



Heirloom

Heirloom Carbon Technologies (Heirloom) - Technology provider



The Proposed Project

- Project Cypress, as proposed, would consist of a network of two Louisiana-based, commercial-scale projects focused on demonstrating the viability of capturing, processing, delivery, and secure geologic storage, and/or conversion of, carbon dioxide (CO₂) from the atmosphere.
- At full build out, Project Cypress would contain the necessary infrastructure to capture, process, and deliver more than 1,000 kilotonnes per annum (KTA) of CO₂.
- **Cypress Southwest in Calcasieu Parish** would demonstrate Climeworks' DAC technology:
 - Stage 1: Climeworks DAC facility with capacity of approximately 300 KTA
 - Stage 2: Climeworks DAC facility with capacity of approximately 1,000 KTA
- **Cypress Northwest in Caddo Parish** would demonstrate Heirloom's DAC technology:
 - Stage 1: Heirloom DAC facility with capacity of approximately 100 KTA



The Proposed Project: Additional Related Actions

Project Cypress would require additional related actions to achieve the project goals:

- **CO₂ Transport and Storage** - CO₂ lateral lines connecting to a CO₂ pipeline network and Class VI CO₂ sequestration well for permanent geologic storage of the removed CO₂
- **Utility Corridors** – are being developed by utility companies for their customers, including Project Cypress

These additional related actions **would not** be funded by DOE and will be described and evaluated in the EIS as appropriate.





DOE's EIS for Project Cypress

Analysis in the EIS

DOE anticipates that the EIS will evaluate **the potential direct, indirect, and cumulative effects** related to the following:

- Land use
- Atmospheric conditions and air quality
- Hydrologic conditions and water quality
- Geology and soils
- Vegetation and wildlife
- Socioeconomic conditions
- Environmental Justice
- Cultural resources
- Visual resources
- Health and safety

This list is not intended to be all-inclusive or to imply a predetermination of potential impacts. DOE invites input on the specific issues, including possible mitigation measures, within these general categories or others, to be considered in the EIS.





Scoping Comments

Scoping Comments

- DOE invites input from federal agencies, tribal, state, and local governments, the public, and other stakeholders on the scope of the EIS.
- Specifically, DOE invites comment on:
 - ✓ identification of reasonable alternatives,
 - ✓ information and analyses relevant to the proposed action, and
 - ✓ environmental issues to be addressed.
- All scoping comments, verbal and written, will be part of the official record and a summary of the scoping comments will be included in the draft EIS.



Scoping Period and Draft EIS Publication



How to Submit Scoping Comments

- Provide comments **TODAY:**
 - Providing a verbal comment to the court reporter
 - Written comments via the provided comment cards
- Submit written comments by **December 16, 2024:**
 - Online at [Regulations.gov](https://www.regulations.gov); docket number: DOE-HQ-2024-0080, or
 - Via U.S. Mail or Hand Delivery Service to:

DOE/EIS-0567
Attn: Robyn Susemihl
4004 Summit Blvd NE, Suite 1200
Atlanta, GA 30319

Scoping comments must be submitted/postmarked **by December 16, 2024**, to ensure consideration in the draft EIS.

