



BOEM BUREAU OF OCEAN
ENERGY MANAGEMENT

Assessment of Carbon Storage Resources on the US Outer Continental Shelf

GCCSI Americas Members Meeting

Houston, Texas

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Office of Strategic Resources

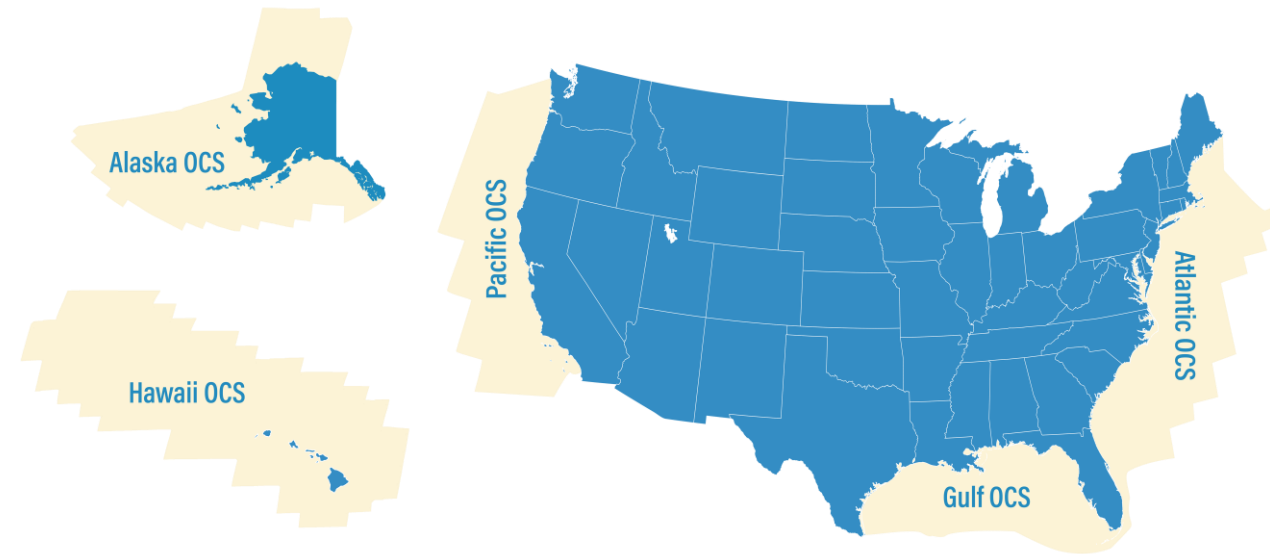
BOEM Mission and Jurisdiction

- BOEM manages the responsible development of America's offshore energy, mineral and geological resources in an environmentally and economically responsible way.
- Our primary mission areas are conventional energy, renewable energy, and marine minerals.
- Our core statutory mandate is provided by the Outer Continental Shelf Lands Act (OCSLA).

3.2 billion acres

of the Outer Continental Shelf

Larger than the size of the nations' land acreage!



Carbon Sequestration Rulemaking

The Infrastructure Investment and Jobs Act (IIJA, November 2021) amended the OCSLA and authorizes DOI to administer leases, easements, and rights-of-way (ROW) on the Outer Continental Shelf (OCS) that **“provide for, support, or are directly related to the injection of a carbon dioxide stream into sub-seabed geologic formations for the purpose of long-term carbon sequestration”**.



Bureau of Ocean Energy Management

Authority to issue leases and grants and review/approve operational plans



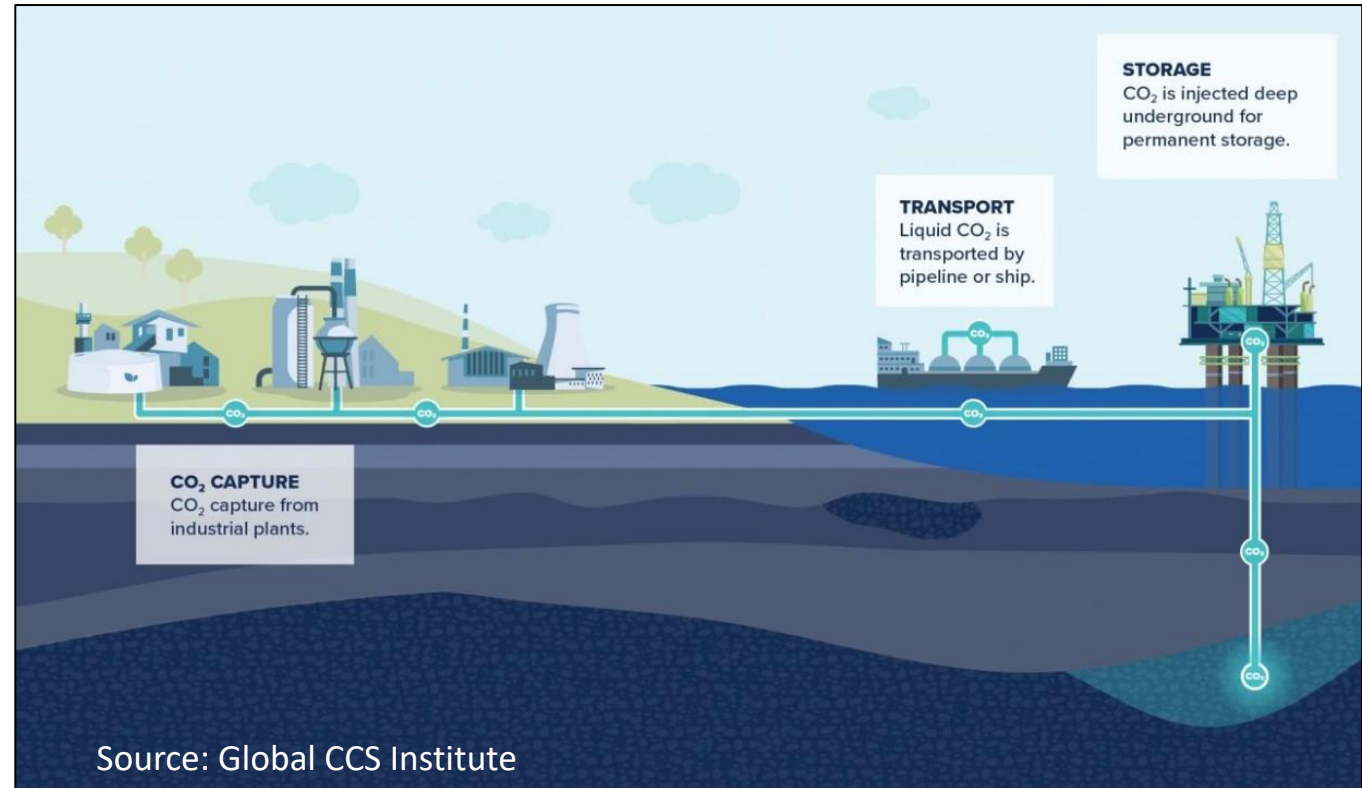
Bureau of Safety and Environmental Enforcement

Authority over operational permitting, safety, and environmental risk

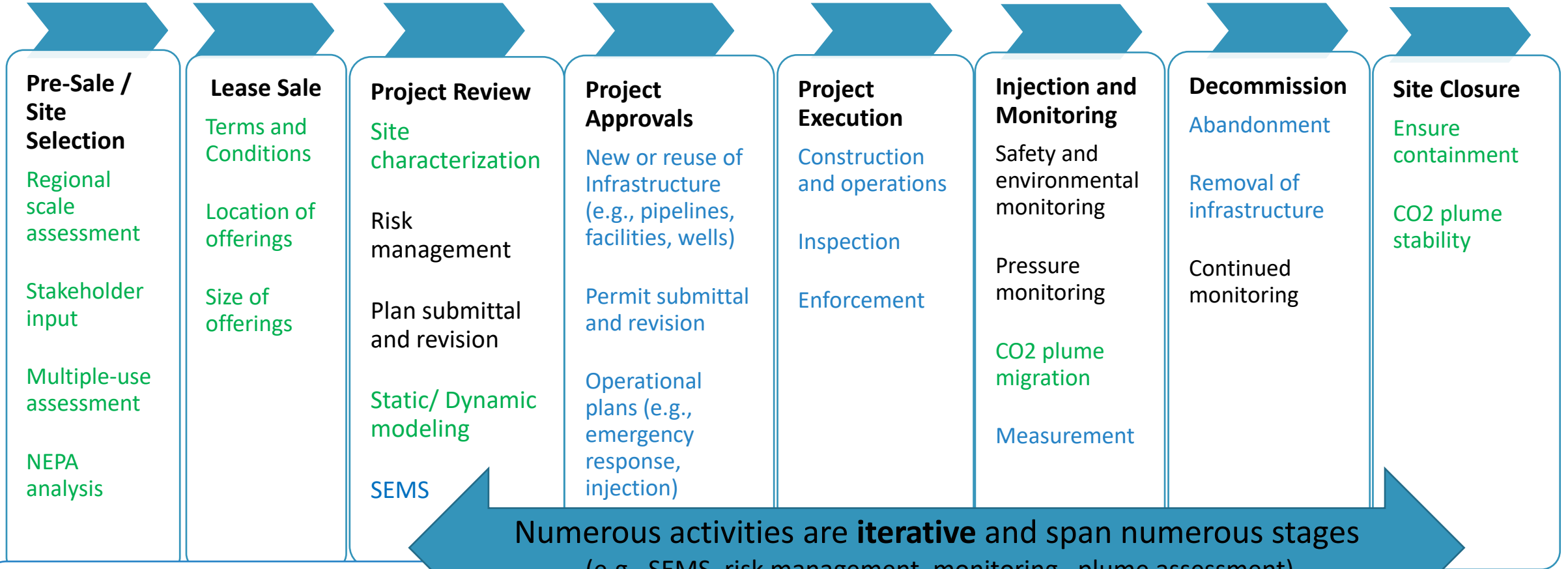
Carbon Sequestration Rulemaking – Topics Considered

Topics considered in the rulemaking:

- Financial & economic considerations
- Environmental considerations
- Pre-lease exploration/site characterization
- Leasing
- Plans
- Liability
- Operations, facilities, and pipelines
- Well qualification and offset infrastructure
- Emergency response and mitigation
- Decommissioning



Regulatory Actions Overlaid with Offshore CS Project Lifecycle



Numerous activities are **iterative** and span numerous stages (e.g., SEMS, risk management, monitoring, plume assessment)

GREEN indicates **BOEM** responsibilities
BLUE indicates **BSEE** responsibilities
BLACK indicates shared **BOEM/BSEE** responsibilities

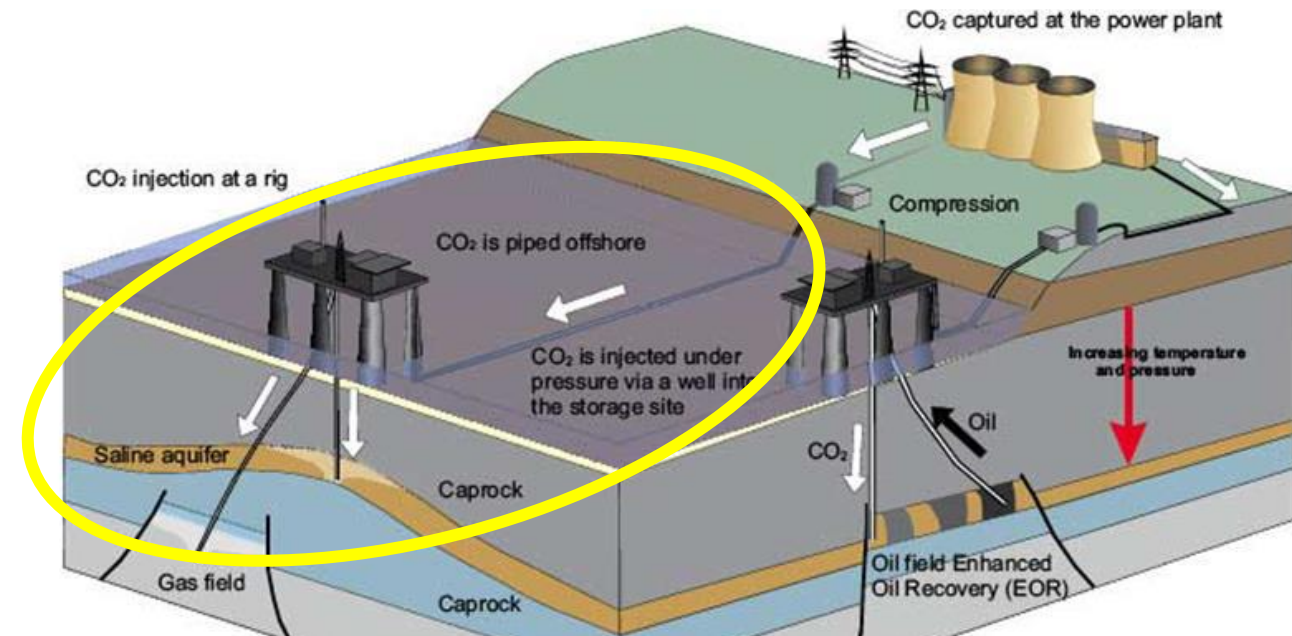
Carbon Storage Net Present Value Analysis

BOEM has developed a full cycle asset simulation model for calculating CS project NPVs

- Utilizing a COTS product PetroVR with carbon storage fiscal terms
- Using a service fee model
- Initially focusing on the offshore component of the development
- Various development scenarios being considered, i.e. platform, caisson, etc.

BOEM uses multiple sources for OCS cost information, including:

- Oil and gas cost files (scalable as necessary)
- Que\$tor commercial database



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Thank You !

BOEM technical CO₂ content available at:

<https://www.boem.gov/oil-gas-energy/resource-evaluation>



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