

Carbon Capture and Storage Workforce Development

Methodology and Assumptions

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Facility Identification

- All facilities analyzed in this study were identified by GPI. This includes industrial and electric power point-source locations for carbon capture, the carbon dioxide pipeline network and CO₂ storage sites.
- These facilities represent GPI's views on near term carbon capture retrofit opportunities in the Regional Carbon Capture Department Initiative states.
- For purposes of the analysis, it is assumed that any identified facilities remain operational through the study period regardless of their current or future economic viability.
- Transport infrastructure buildout scenarios, CO₂ transport networks and storage sites were devised from the <u>Regional Carbon Capture Deployment Initiative's use of SimCCS modeling</u>.

Cost Characterization

- Capital and operations & maintenance costs are independently assessed by Rhodium for the industrial and electric power point-source locations for carbon capture using Rhodium's Industrial Carbon Abatement Platform (ICAP).
- Carbon capture (in million metric tons) at each plant are determined as part of the cost analysis; therefore these numbers may vary slightly from the GPI plant-level assessment.
- Transport infrastructure costs are from SimCCS^{PRO} run by <u>Carbon Solutions</u>.
- Rhodium developed CO₂ storage cost methodologies for both onshore and offshore saline storage as well as costs for storage at enhanced oil recovery (EOR) sites.
- For onshore storage site cost characterization, we rely primarily on EPA data.
- For offshore storage site cost characterization, we use data from <u>EPA</u>, <u>IEA</u>, <u>BOEM</u>, and <u>NOAA</u>.

Employment and Occupational Analysis

- We assume the carbon capture retrofits and corresponding transport infrastructure will be built over a 15-year time period, from 2024 through 2038.
- This assumption does not represent Rhodium Group's view on carbon capture opportunities or infrastructure deployment.
- We use the economic model IMPLAN's state-level (2021 data year) tools for the employment analysis.
- Occupational analyses are also conducted using IMPLAN, supplemented by BLS data.
- We estimate in-state jobs and occupations associated with the investment for carbon capture within each state.
- Jobs associated with capital investments are the average annual jobs over the 15-year time-period.
- Ongoing operation jobs represent the on-site and off-site jobs associated with operating the carbon capture retrofit equipment at each facility each year.
- Employment per industrial output is assumed to stay constant over time.

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