

# Making Carbon a Commodity: The Potential of Carbon Capture RD&D



"Making Carbon a Commodity" examines the potential for market-driven deployment of carbon capture projects for enhanced oil recovery. The core analyses were conducted by NERA Economic Consulting and Advanced Resources International.



**Background:** The U.S. power sector's annual production of over 1,500 million tons of carbon dioxide represents a potentially prolific economic opportunity: **carbon dioxide can be captured from power plants and sold for oil production.**

**Findings:** An aggressive RD&D program could enable significant carbon capture deployment, culminating in **62 to 87 GW** of fossil power plants with carbon capture in operation by 2040.

**Benefits:** Carbon capture RD&D generates a range of energy security and macroeconomic benefits, including::

- **Up to a 40% increase in domestic coal production for power** from 2020 to 2040.
- **104 to 923 million barrels** of additional domestic oil produced annually by 2040 and up to 2,300 million metric tons of carbon dioxide captured from power plants to support the growth.
- **268,000 to 780,000 new jobs and a \$66 billion to 190 billion increase in annual gross domestic product (GDP)** associated with enhanced oil recovery field operations by 2040.



Aggressive RD&D reduced the national retail cost of electricity **1.1 to 2.0% by 2040**, which on its own is forecasted to increase annual GDP by an additional **\$30 to 50+ billion** and create **200,000 to 375,000+ more jobs.**

## Recommendations:

- A public-private partnership across the entire RD&D cycle.
- Streamlined rules and regulations.
- An aggressive commitment to the Carbon Capture & Power Systems program.
- IRS interpretation of the recently amended section 45Q carbon capture tax credit.