

TOTAL JOBS POTENTIAL

Project Jobs	Operations Jobs	Infrastructure Jobs
1,215	1,040	890

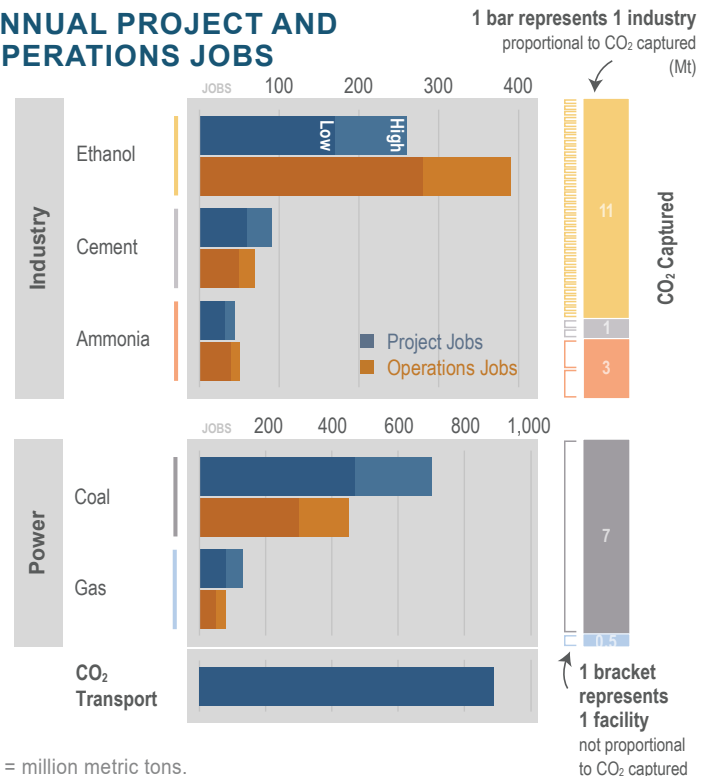
Iowa has the opportunity to create an annual average of up to **2,105 project jobs** over a 15-year period and **1,040 ongoing operations jobs** through deployment of carbon capture technology at 44 industrial and power facilities. The retrofit of equipment at these facilities would capture **22.5 million metric tons** of carbon dioxide (CO₂) per year. Along with the development of CO₂ transport infrastructure, this would generate up to **\$5.4 billion** in private investment.

CREATING JOBS & CAPTURING CARBON

Carbon capture is essential to meeting mid-century emissions reduction goals while retaining and growing a domestic base of high-wage energy, industrial, and manufacturing jobs. Carbon capture retrofits require facilities to be outfitted with capture technologies such as amine scrubbers to remove CO₂ from exhaust gas and compressors to make the CO₂ transport-ready, that are dependent upon the type of industrial plant and vary across industries and facilities. There are jobs associated with the equipment, materials (e.g., cement and steel), engineering, and labor required to install the capture technology, as well as ongoing jobs to operate and maintain the retrofits. These are referred to as **project jobs** and **operations jobs**.

Rhodium Group performed an economic analysis based on the Regional Carbon Capture Deployment Initiative's near- and medium-term capture potential scenario.¹ The Rhodium analysis quantifies the economic impact and employment opportunities of carbon capture retrofit projects by deploying state-specific data in the IMPLAN economic model. The analytical results measure the impact of project investment and operation costs through expected annual jobs. Average annual project jobs were calculated assuming deployment of all projects within the 15-year period from 2021-2035. The jobs reported are in-state jobs, directly associated with carbon capture retrofits. They do not include other jobs at the facilities, nor indirect and induced jobs.

ANNUAL PROJECT AND OPERATIONS JOBS



Mt = million metric tons.

This figure depicts the low and high range of estimated annual average project jobs, transport infrastructure jobs, and ongoing operations jobs that could be created through carbon capture retrofits at industrial and power facilities in Iowa. The potential amount of CO₂ captured and the number of potential near- or medium-term capture facilities in each industry are shown on the right.

RESULTS

Much of Iowa's potential to capture carbon comes from its robust ethanol industry. Thirty-eight of Iowa's ethanol plants have the combined potential to create an annual average of up to 260 project jobs and 390 ongoing operations jobs while capturing 11 million metric tons of CO₂ annually. Iowa's cement and ammonia facilities have the combined potential to create an annual average of up to 125 project jobs and 120 ongoing operations jobs while capturing 4 million metric tons of CO₂ per year. In the power sector, coal and gas plants have the combined ability to create an annual average of up to 830 project jobs and 530 operations jobs while capturing 7.5 million metric tons of CO₂ annually. Development of CO₂ transport infrastructure would create an annual average of 890 project jobs.

CARBON CAPTURE JOBS AND ECONOMIC IMPACT SUMMARY

Industry	Number of Facilities	Total Capture Target Metric Tons	Private Investment Million Dollars	Annual Average Project Jobs 2021-2035	Annual Operations Jobs
Ammonia	2	3,000,000	\$90 - \$130	25 - 35	40 - 50
Cement	2	1,000,000	\$190 - \$290	60 - 90	50 - 70
Coal Power	1	7,000,000	\$1,500 - \$2,200	470 - 700	300 - 450
Ethanol	38	11,000,000	\$590 - \$880	170 - 260	280 - 390
Gas Power	1	500,000	\$300 - \$400	80 - 130	50 - 80
CO ₂ Transport Infrastructure	-	-	\$1,500	890	-

¹ Rhodium Group analytical results: rhg.com/research/

For more information, visit carboncaptureready.org