REGIONAL CARBON **CAPTURE** DEPLOYMENT INITIATIVE

JOBS AND ECONOMIC IMPACT OF CARBON CAPTURE DEPLOYMENT Indiana

TOTAL JOBS POTENTIAL

Project Jobs

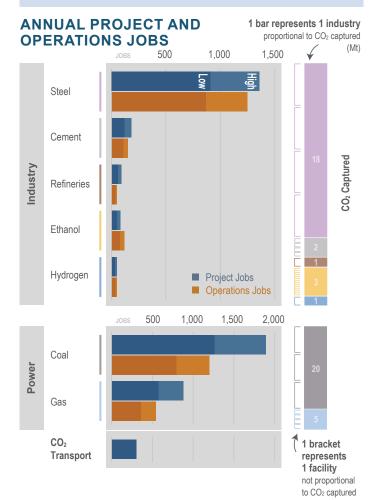
Operations Jobs

Infrastructure Jobs 330

4.530

3,360

Indiana has the opportunity to create an annual average of up to 4,860 project jobs over a 15- year period and 3,360 ongoing operations jobs through the deployment of carbon capture at 30 industrial and power facilities. The retrofit of equipment at these facilities would capture 50 million metric tons of carbon dioxide (CO₂) per year. Along with the development of CO₂ transport infrastructure, this would generate up to \$15 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 highwage 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 mediumterm 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.

RESULTS

As the fifth largest ethanol producer in the US, 13 of Indiana's ethanol facilities have the combined potential to create an annual average of up to 80 project jobs and 120 ongoing operations jobs while capturing three million metric tons of CO₂ per year with carbon capture retrofit. Indiana also has cement, coal, gas, steel, refining, and hydrogen facilities that, combined, can create an annual average of up to 4,450 project jobs and 3,240 ongoing operations jobs while capturing 47 million metric tons of CO₂ per year. The development of CO₂ transport infrastructure would create an annual average of 330 project jobs.

The figure to the left 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 Indiana. 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. Mt = million metric tons.

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
Cement	4	2,000,000	\$380 - \$570	120 - 180	110 - 150
Coal Power	3	20,000,000	\$4,100 - \$6,200	1,260 - 1,890	800 - 1,200
Ethanol	13	3,000,000	\$190 - \$280	50 - 80	80 - 120
Gas Power	4	5,000,000	\$1,800 - \$2,700	580 - 880	360 - 540
Hydrogen	1	1,000,000	\$110 - \$160	35 - 50	40 - 50
Refineries	1	1,000,000	\$140 - \$220	60 - 90	40 - 50
Steel	4	18,000,000	\$2,840 - \$4,260	910 - 1,360	870 - 1,250
CO ₂ Transport Infrastructure	-	-	\$560	330	-

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