

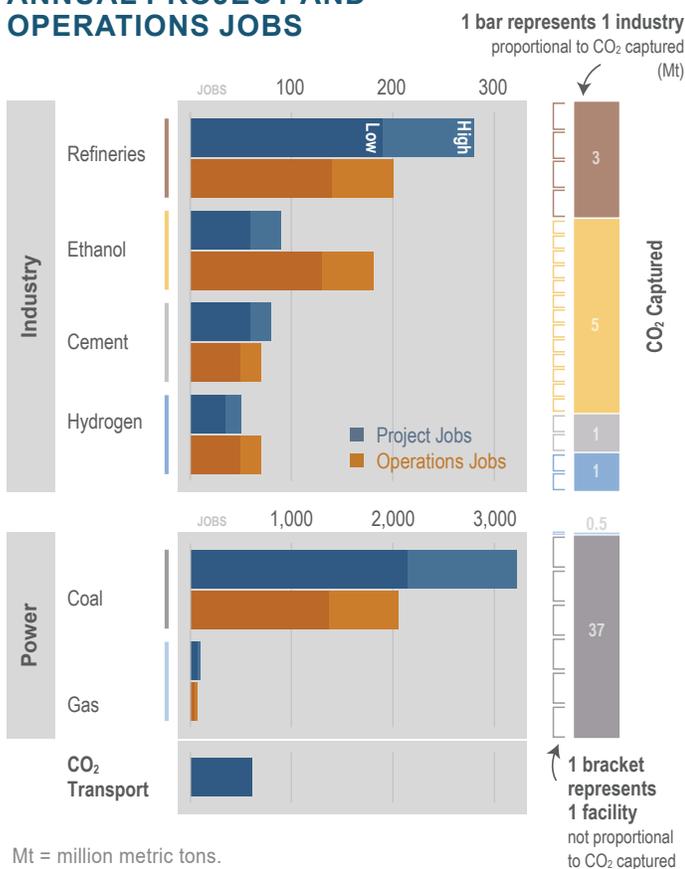
# JOBS AND ECONOMIC IMPACT OF CARBON CAPTURE DEPLOYMENT Illinois

## TOTAL JOBS POTENTIAL

Project Jobs	Operations Jobs	Infrastructure Jobs
<b>3,800</b>	<b>2,620</b>	<b>600</b>

Illinois has the opportunity to create an annual average of up to **4,400 project jobs** over a 15-year period and **2,620 ongoing operations jobs** through the deployment of carbon capture at 28 industrial and power facilities. The retrofit of equipment at these facilities would capture **47.5 million metric tons** of carbon dioxide (CO<sub>2</sub>) per year. Along with the development of CO<sub>2</sub> transport infrastructure, this would generate up to **\$15.3 billion** in private investment.

## ANNUAL PROJECT AND OPERATIONS JOBS



## 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 CO<sub>2</sub> from exhaust gas and compressors to make the CO<sub>2</sub> 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.<sup>1</sup> 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

Illinois has multiple sectors with the potential to create jobs and reduce emissions through the deployment of carbon capture technology. Thirteen of Illinois' ethanol facilities, two cement facilities, two hydrogen facilities, and four refineries have the combined potential to create an annual average of up to 500 project jobs and 520 ongoing operations jobs while capturing ten million metric tons of CO<sub>2</sub> emissions per year. In the power sector, six of the state's coal plants and one gas plant would create an annual average of up to 3,300 project jobs and 2,100 operations jobs while capturing 37.5 million metric tons of CO<sub>2</sub> per year. Additionally, the development of transportation infrastructure would create an annual average of 600 project jobs.

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 Illinois. The potential amount of CO<sub>2</sub> captured and the number of potential near- or medium-term capture facilities in each industry are shown on the right.

## 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	2	1,000,000	\$190 - \$290	60 - 80	50 - 70
Coal Power	6	37,000,000	\$8,000 - \$1,2000	2,130 - 3,200	1,360 - 2,040
Ethanol	13	5,000,000	\$230 - \$340	60 - 90	130 - 180
Gas Power	1	500,000	\$200 - \$400	70 - 100	40 - 60
Hydrogen	2	1,000,000	\$120 - \$180	35 - 50	50 - 70
Refineries	4	3,000,000	\$500 - \$750	190 - 280	140 - 200
CO <sub>2</sub> Transport Infrastructure	-	-	\$1,300	600	-

<sup>1</sup> Rhodium Group analytical results: [rhg.com/research/](http://rhg.com/research/)

For more information, visit [carboncaptureready.org](http://carboncaptureready.org)