REGIONAL CARBON CAPTURE DEPLOYMENT INITIATIVE

JOBS AND ECONOMIC IMPACT OF CARBON CAPTURE DEPLOYMENT
Missouri

TOTAL JOBS POTENTIAL

Project Jobs	Operations Jobs	Infrastructure Jobs
2,805	1,840	1,030

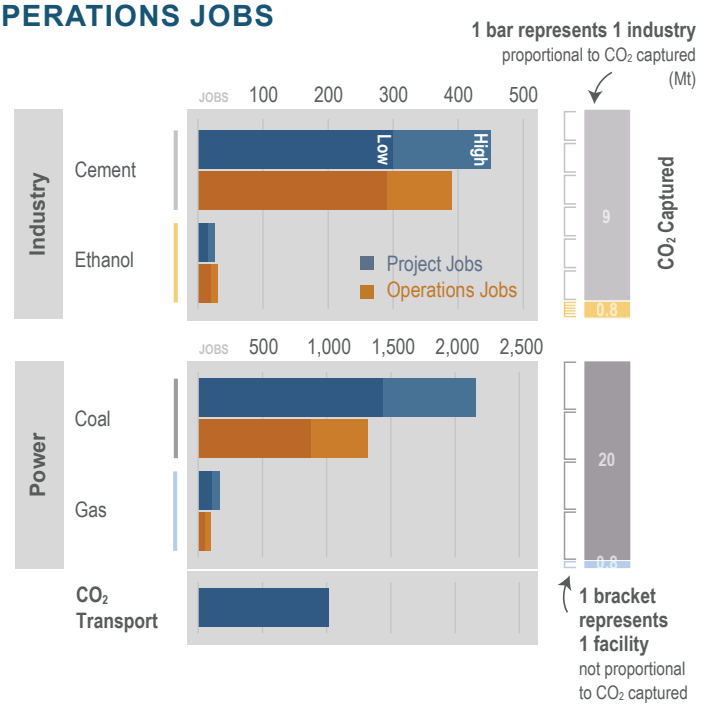
Missouri has the opportunity to create an annual average of up to **3,835 project jobs** over a 15-year period and **1,840 ongoing operations jobs** through the deployment of carbon capture technology at 17 industrial and power facilities. Retrofit of these facilities would capture **30.6 million metric tons** of carbon dioxide (CO_2) per year with carbon capture retrofit. Along with the development of CO_2 transport infrastructure, this would generate up to **$10.7 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 CO_2 from exhaust gas and compressors to make the CO_2 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 Missouri. The potential amount of CO_2 captured and the number of potential near- or medium-term capture facilities in each industry are shown on the right.

RESULTS

Cement, ethanol, and gas power plants in Missouri hold the combined potential to create an annual average of up to 645 project jobs and 520 ongoing operations jobs while capturing over ten million metric tons of CO_2 per year. Four of Missouri's coal power plants have near-term carbon capture retrofit potential. These four facilities have the combined potential to create up to an annual average of 2,160 project jobs and 1,320 ongoing operations jobs while capturing 20 million metric tons of CO_2 per year with carbon capture retrofit. In addition to jobs associated with retrofitting a facility, the development of CO_2 transport infrastructure would create an annual average of 1,030 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**
Cement	7	9,000,000	$930 - $1400	300 - 450	290 - 390
Coal Power	4	20,000,000	$4,600 - $6,900	1,440 - 2,160	880 - 1,320
Ethanol	5	800,000	$60 - $80	15 - 25	20 - 30
Gas Power	1	800,000	$300 - $500	110 - 170	60 - 100
CO_2 Transport Infrastructure	-	-	$1,800	1,030	-

[1] Rhodium Group analytical results: **rhg.com/research/**