## REGIONAL CARBON **CAPTURE** DEPLOYMENT INITIATIVE

# JOBS AND ECONOMIC IMPACT OF CARBON CAPTURE DEPLOYMENT Utah

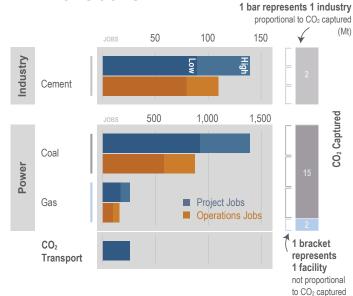
**TOTAL JOBS POTENTIAL** 

Project Jobs Operations Jobs

Infrastructure Jobs 270

1,790 1,140

**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 Utah. The potential amount of CO2 captured and the number of potential near- or mediumterm capture facilities in each industry are shown on the right.

## year period and 1,140 ongoing operations jobs through the deployment of carbon capture at seven industrial and power facilities. The retrofit of equipment at these facilities would capture **19 million metric tons** of carbon dioxide (CO<sub>2</sub>)

Utah has the opportunity to create an annual

average of up to 2,060 project jobs over a 15-

per year. Along with the development of CO<sub>2</sub> transport infrastructure, this would generate up to \$6.5 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 instate jobs, directly associated with carbon capture retrofits. They do not include other jobs at the facilities, nor indirect and induced jobs.

## **RESULTS**

Utah has the potential to create jobs and reduce emissions from both the industrial and power sectors. If carbon capture equipment is deployed at three of the state's cement facilities, it would create an annual average of up to 140 project jobs and 110 ongoing operations jobs while capturing two million metric tons of CO<sub>2</sub> emissions per year. In the power sector, three of the state's coal plants and one gas power plant have the combined potential to create an annual average of up to 1,650 project jobs and 1,030 ongoing operations jobs. The majority of these jobs are created in the coal sector. The power sector has the potential to capture 17 million metric tons of CO<sub>2</sub> annually with carbon capture technology. Additionally, the development of CO<sub>2</sub> transportation infrastructure would create an annual average of up to 270 jobs.

### CARBON CAPTURE JOBS AND ECONOMIC IMPACT SUMMARY

Industry	Number of Facilities	<b>Total Capture Target</b> Metric Tons	Private Investment Million Dollars	Annual Average Project Jobs 2021-2035	Annual Operations Jobs
Cement	3	2,000,000	\$290 - \$430	90 - 140	80 - 110
Coal Power	3	15,000,000	\$3,200 - \$4,700	920 - 1,390	580 - 870
Gas Power	1	2,000,000	\$600 - \$800	170 - 260	100 - 160
CO <sub>2</sub> Transport Infrastructure	-	-	\$570	270	-