

# JOBS AND ECONOMIC IMPACT OF CARBON CAPTURE DEPLOYMENT Pennsylvania

## TOTAL JOBS POTENTIAL

Project Jobs	Operations Jobs
<b>8,557</b>	<b>5,504</b>

Pennsylvania has the opportunity to create up to **8,557 project jobs** annually over a 15-year period and **5,504 ongoing operations jobs** by adding carbon capture to 33 industrial and power facilities. Developing carbon dioxide (CO<sub>2</sub>) capture, transport and storage infrastructure at these facilities could generate up to **\$34 billion in private investment** and capture **64 million tons** of CO<sub>2</sub> every year.

## 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 technologies to remove the CO<sub>2</sub> and ensure it is transport ready. The type of technology used is dependent on the type of plant and varies across industry 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**.

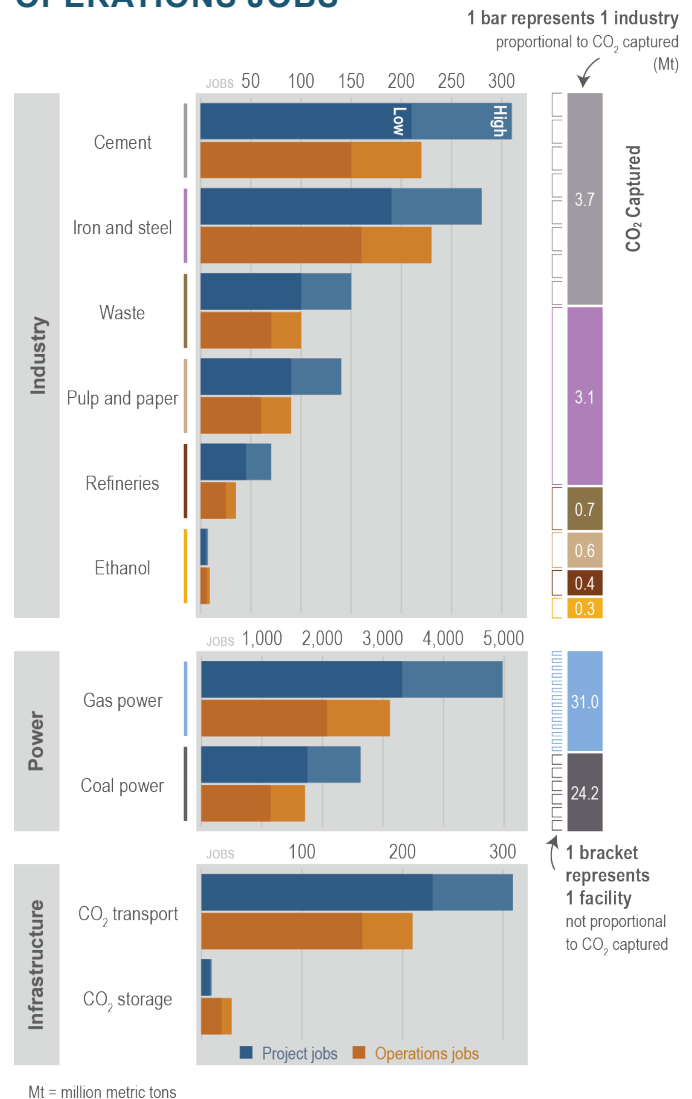
## METHODOLOGY

Rhodium Group performed an economic analysis based on the Regional Carbon Capture Deployment Initiative's Near- and Medium-Term capture potential scenario. 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 over a 15-year period. 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

Cement plants, iron and steel, waste processing, pulp and paper facilities, refineries, and ethanol facilities in Pennsylvania have the combined potential to create an annual average of up to 957 project jobs and 684 ongoing operations jobs, while capturing 9 million metric tons of CO<sub>2</sub> per year with carbon capture retrofit. Pennsylvania also has 20 gas and coal power facilities with the combined potential to create an annual average of up to 7,600 project jobs and 4,820 ongoing operations jobs, while capturing 55.1 million metric tons of CO<sub>2</sub>. The development of transport infrastructure could create an annual average of up to 310 project jobs and 210 ongoing jobs. The development of storage infrastructure could create an annual average of up to 10 project jobs and 30 ongoing jobs.

## ANNUAL PROJECT AND OPERATIONS 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 Pennsylvania. 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 above.

For more information on this effort and to view a series of state fact sheets showcasing carbon capture opportunities and economic potential for job creation, go to [www.carboncaptureready.org](http://www.carboncaptureready.org) or contact Kelley Reiersen at [kreierson@gpsid.net](mailto:kreierson@gpsid.net).