CAPTURE DEPLOYMENT Kentucky

REGIONAL JOBS AND ECONOMIC IMPACT CARBON OF CARBON CAPTURE DEPLOYMENT

TOTAL JOBS POTENTIAL

Project Operations Jobs Jobs 5.080 3,301

Kentucky has the opportunity to create an annual average of up to 5,080 project jobs over a 15-year period and 3,301 ongoing operations jobs through the deployment of carbon capture at 14 industrial and power facilities. Developing carbon dioxide (CO₂) capture, transport and storage infrastructure at these facilities could generate up to \$19 billion in private investment and capture 43 million metric tons of CO₂ every year.

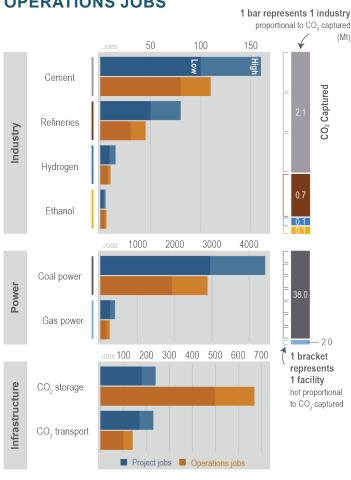
CREATING JOBS & CAPTURING CARBON

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 CO₂ 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.

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 Kentucky. The potential amount of CO₂ 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 or contact Kelley Reierson at kreierson@gpisd.net.

RESULTS

Cement, ethanol, hydrogen facilities and refineries hold valuable potential for emissions reductions and job creation in Kentucky with carbon capture retrofit, with the potential to create an annual average of up to 260 project jobs and 171 ongoing operations jobs while capturing three million metric tons of CO₂ per year. Kentucky's gas and coal power facilities could also create an annual average of up to 4,820 project jobs and 3,130 ongoing operations jobs while capturing 40 million metric tons of CO₂ per year. The development of transport infrastructure could create an annual average of up to 230 project jobs and 140 ongoing operations jobs. The development of storage infrastructure would create an annual average of up to 240 project jobs and 670 ongoing operations jobs.