Install up to 13 gigawatts of utility-scale wind power by 2030 using project labor agreements (PLAs).

Climate Jobs Recommendation

A historic investment in land-based utility-scale wind power can be spurred with a new procurement for renewable energy credits (RECs). Installing up to 13 gigawatts of utility-scale wind requires an investment of $19 billion ($1.47 per watt) (NREL, 2019). This can be incentivized by increasing Illinois Power Agency (IPA) RECs and introducing flexible REC pricing. RECs are equivalent to one megawatt-hour of energy generated from renewable sources. Illinois should also enact a statewide zoning standard to reduce regulations and limit project delays for utility-scale wind projects.

Background and Details

Illinois is a prime location for utility-scale wind projects, which are now cheaper than carbon-based energy projects. Illinois ranks 6th in the nation for installed wind capacity, 17th in the share of in-state electricity generation provided by wind, and 3rd in wind industry employment (AWEA, 2020). Most of the state has an average wind speed of 6.5 to 7.0 meters per second at the height of utility-scale wind turbines, which is considered suitable for wind development (USDOE, 2020). Utility-scale wind projects are also cheaper per megawatt-hour than new coal and natural gas projects (Lazard, 2017). The levelized cost of energy (LCOE) is $30 to $60 per megawatt-hour for wind projects compared with per megawatt-hour costs of $60 to $143 for coal projects and $68 to $106 for natural gas projects.

A Pro-Worker, Pro-Climate Illinois

Installing up to 13 gigawatts of land-based utility-scale wind power by 2030 would cut carbon emissions in Illinois' power sector by as much as 38% and save or create up to 86,000 total jobs. Currently, Illinois' coal plants, natural gas plants, and petroleum plants produce more than 33 gigawatts of energy and emit 73 million metric tons of CO_2. Installing up to 13 gigawatts of wind power by 2030 would cut Illinois' carbon emissions by up to 28 metric tons (38%), equivalent to powering 2.9 million homes (AWEA, 2020). For every one gigawatt of utility-scale wind power installed, about 6,700 total jobs are saved or created, including 2,400 direct jobs for skilled construction workers. Every one gigawatt of utility-scale wind installed also boosts economic output by $2.7 billion, a multiplier of $1.84 per dollar invested (IMPLAN, 2020). With new legislation to apply prevailing wage standards and project labor agreements (PLAs)– comprehensive pre-hire agreements that include apprenticeship ratios, targeted hire goals, and no-strike clauses– on these projects, the development of utility-scale wind energy would uphold local standards of compensation and craftsmanship and create thousands of stable middle-class careers in Illinois.

Figure 1: Economic Impact of Installing 1 GW of Utility-Scale Wind Power in Illinois

Economic Impacts	Primary Sectors	Jobs Created Or Saved	Total Worker Income in Illinois	Total Economic Output in Illinois
Direct	Construction	2,400	$318 million	$1.47 billion
Indirect	Manufacturing, Technical Services, and Transportation	2,100	$187 million	$0.85 billion
Induced	Health Care, Real Estate, and Restaurants and Bars	2,200	$125 million	$0.37 billion
Total Impacts		**6,700**	**$629 million**	**$2.69 billion**

This Climate Jobs Recommendation has been compiled by Climate Jobs Illinois' research partners at the Project for Middle Class Renewal at the University of Illinois at Urbana-Champaign, the Illinois Economic Policy Institute (ILEPI), and the Worker Institute at Cornell University.