Install up to 10 gigawatts of utility-scale solar power by 2030 using project labor agreements (PLAs).

Climate Jobs Recommendation

A historic investment in utility-scale solar power can be spurred with a new procurement for renewable energy credits (RECs). Installing up to 10 gigawatts of utility-scale solar would require an investment of $11 billion ($1.13 per watt) (NREL, 2018). This can be incentivized by expanding the High Impact Business (HIB) program to large solar energy facilities, increasing Illinois Power Agency (IPA) RECs, introducing flexible REC pricing, and prioritizing utility-scale projects– which are the most cost-effective way to meet the state's clean energy goals. 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 solar projects.

Background and Details

Utility-scale solar projects should be prioritized over distributed solar projects, such as rooftop and residential projects. Illinois ranks 30th in the nation for total solar installed and 13th in solar industry employment (SEIA, 2020). Utility-scale solar projects have accounted for 60% of all new installed solar capacity since 2012 because they are more cost-effective (Bolinger et al., 2019). The levelized cost of energy (LCOE) is $43 to $53 per megawatt-hour for utility-scale solar projects compared with a per megawatt-hour cost of $76 to $150 for community projects and $187 to $319 for residential projects.

A Pro-Worker, Pro-Climate Illinois

Promoting the development of up to 10 gigawatts of utility-scale solar power by 2030 would cut carbon emissions in Illinois' power sector by as much as 30% and save or create up to 76,000 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 10 gigawatts of solar power by 2030 would cut Illinois' carbon emissions by up to 22 metric tons (30%), equivalent to powering 2.2 million homes (AWEA, 2020). For every one gigawatt of utility-scale solar power installed, about 7,600 total jobs are saved or created, including 2,800 directly for skilled construction workers. Each investment that produces one gigawatt of utility-scale solar also boosts economic output by $2.4 billion, a multiplier of $2.08 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 large construction projects, the development of utility-scale solar energy would ensure that a strong Illinois is built locally with responsible contractors and skilled workers.

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

Economic Impacts	Primary Sectors	Jobs Created Or Saved	Total Worker Income in Illinois	Total Economic Output in Illinois
Direct	Construction	2,800	$374 million	$1.13 billion
Indirect	Manufacturing, Technical Services, and Transportation	1,800	$162 million	$0.73 billion
Induced	Health Care, Real Estate, and Restaurants and Bars	3,000	$165 million	$0.49 billion
Total Impacts		**7,600**	**$701 million**	**$2.35 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.