

Solar Auction Cancellations and the Cost of Renewable Energy

Closed to further applications

Faculty Member: [Nicholas Ryan](#)

This project is eligible for remote work.

Proposal Description:

For the world to reduce greenhouse gas emissions growth, developing countries will have to move away from fossil fuels and toward renewable energy. The size and pace of this transition will depend on whether developing countries can procure green power cheaply, at rates near the low cost of brown power. India, among other countries, has set ambitious policy goals for renewable capacity and is using renewable auctions as the main way to meet these goals at a low cost.

We study how auction practices and state commitment affect the cost of renewable energy. Indian states buy renewable power at auction to get the cheapest price. Many states, however, have cancelled auctions after the fact, if the cheapest price at the auction is still too high for their liking. Cancellations act as a “secret reserve” price and may drive down the cost of procurement, increasing renewable energy uptake by states. When cancellations are common, however, it may increase risk for developers and deter potential solar projects from being started at all. We study the effect of these cancellations on developer risk, auction participation and the quantity and cost of solar energy procured.

Requisite Skills and Qualifications:

The RA would gather data on thermal power generation by firms that produce both renewable and non-renewable energy. The RA would merge data on thermal power generation with renewable energy bids, to understand linkages across different segments of the power market that may affect bidding behavior. The RA would help conduct data analysis of auction outcomes and their relation to the bids offered. Depending on time demands and availability, the RA may also work on other energy and environmental projects with Prof. Ryan. Familiarity with Stata or R is a requirement and Matlab is a plus.

Award: Andrew Wei

Tracy Zhou

Tobin Application Link: [Tobin Application](#)

Project Type: Tobin RA

Project Year: 2020

Term: Fall 2020

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