

## Wadhvani/Nathan Breakthrough Index: Solar Policy

State	Total
Andhra Pradesh	24.5
Rajasthan	20.0
Telangana	18.5
Delhi	18.5
Haryana	18.2
Chhattisgarh	15.7
Uttarakhand	14.3
Sikkim	13.7
Himachal Pradesh	13.6
Odisha (Orissa)	12.4
Tamil Nadu	12.4
Karnataka	12.3
Maharashtra	12.2
Puducherry	12.0
Madhya Pradesh	11.8
Gujarat	11.6
Kerala	11.5
Jammu & Kashmir	11.2
Chandigarh	11.1
Assam	9.9
Goa	9.8
Uttar Pradesh	9.5
Tripura	9.2
Jharkhand	8.6
Bihar	7.8
Arunachal Pradesh	7.2
Manipur	7.2
Mizoram	7.2
Punjab	6.9
Meghalaya	5.6
West Bengal	4.4
Nagaland	1.2

**This issue:** In September 2016, [Madhya Pradesh](#) became the latest state to encourage consumers to install solar rooftop panels. But despite the vogue for such sources of renewable energy, state policies vary widely. We awarded [Andhra Pradesh](#) Breakthrough status for a policy that offers generous incentives to producers and consumers, including ambitious purchase targets and net-metering policies.

**Why it matters:** India has set an extraordinarily ambitious goal of reaching 175 gigawatts (GW) of renewables production by 2022. Of that total, 100 GW is set come from solar, 40 percent of it from rooftop solar. But at the current pace, India will only have [12 GW](#) of rooftop solar by 2022. To foster growth, states need to set policies that encourage solar production (and meet implementation [challenges](#)).

**How the Index works:** We rank state solar policies in three areas: the value of producer incentives, the consumer friendliness of their net-metering policy, and the ambition of their renewable purchase obligation (RPO) targets. Each category had a maximum score of 10, with up to 3 bonus points for making rooftop solar mandatory. The maximum possible score was 33.

RPO targets were evaluated based on the government of India's suggested solar generation targets for each state (an indication of solar potential). Net-metering scores were based on whether or not the state had strict limits on rooftop solar generation and whether consumers could bank their excess production and receive cash credits for it. Producer incentive scores reflect whether a state assigns solar must-run status, gives solar plants the same incentives as other industries, and exempts solar generation from common electricity generation taxes and charges.

**Our data:** We drew data almost exclusively from published government sources. Given our belief that making information available to citizens is a crucial part of any policy, if we could not find a regulation after an exhaustive search, we coded it as nonexistent. Raw data and sources are available on request; please contact [SWatson@csis.org](mailto:SWatson@csis.org).

## Highlights from the Data

- Three states (Andhra Pradesh, Delhi, and Kerala) received the top possible score for their net-metering policies. Top scorers in this category do not restrict rooftop solar capacity on the state, local (transformer), or household level, beyond limits necessary for safe functioning of the grid. They allow customers to bank electricity ejected into the grid by rooftop solar units from month to month (allowing the owner of the unit to profit from sunny days during the rainy season), and they pay cash for production in excess of consumption on a monthly or yearly basis.
- Rajasthan was the clear front-runner when it came to RPO commitments. Its target—6.75 percent of total production must come from solar sources by 2019—was well above the second-place finisher, Tamil Nadu (6 percent). And Rajasthan, unlike Tamil Nadu, requires all power producers in the state—even privately owned ones—to meet RPO targets, netting it a bonus point.
- Haryana won maximum bonus points for its wide-ranging solar rooftop unit requirements. Haryana requires the units to be installed on private buildings with a connected load of more than 50 kilowatts, all private buildings on plots larger than 4,500 square feet, and all new housing developments.

