

Republicans and Democrats alike are installing rooftop solar

Americans across the political spectrum are participating in the clean energy transition – and rooftop solar households are more likely to vote than their neighbors without solar.

Based on Matto Mildenerger, Peter Howe and Chris Miljanich. 2019. "Households with solar installations are ideologically diverse and more politically active than their neighbors." *Nature Energy* 4: 1033–1039.

The Policy Problem

Over the last decade, hundreds of thousands of Americans have installed rooftop solar, joining the clean energy transition at the individual level. Has this behavior been politically polarized? On one hand, clean energy uptake might be partisan, concentrated among Democratic households or households that accept climate science. On the other hand, households could be adopting solar because clean energy makes financial sense, no matter their political leanings or climate beliefs.

Key Findings

- Households with solar installations are ideologically and politically diverse
- Households with solar rooftops are significantly more likely to vote in both primary and general elections than their neighbors
- Americans across the political spectrum are already participating in the clean energy transition - and might be mobilized to defend clean energy

What We Found

We find that households across the political spectrum have adopted solar. Nationally, there are more Democrats than Republicans with solar on their roofs – but this is because solar roofs are more common in Democratic states. By contrast, at the neighborhood level, Democrats and Republicans are just as likely to install solar panels. Solar households are more likely to vote in primary and general elections, suggesting a potential bipartisan source of political pressure to defend the clean energy transition.

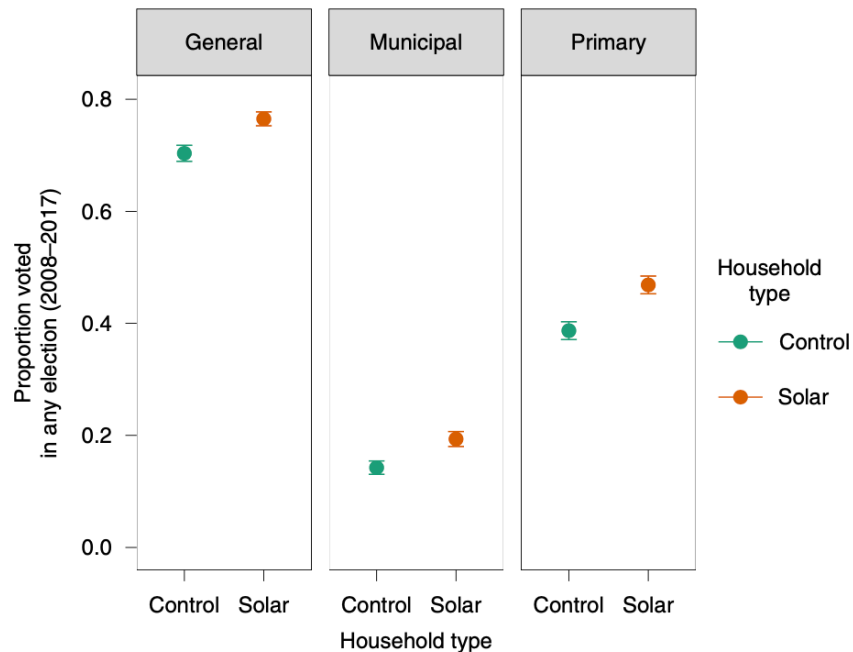


Figure: Comparing voting rates in households with rooftop solar versus their neighbors without solar. The y-axis gives the fraction of households in our sample who voted in a given election type at least once between 2008 and 2017. Voting is significantly more frequent in general, municipal, and primary elections among households with solar panels (red), relative to a control group of otherwise similar neighboring households who do not have rooftop solar (green).

What We Did

We generated a representative sample of 4,129 US households with solar on their roofs using satellite imagery (via Google’s [Project Sunroof](#)). We also generated a random sample of 4,129 neighboring addresses without solar installations. We then compared voter file data for both the solar and neighboring non-solar households, including the demographic characteristics of household members, voting histories, and partisan affiliations.