

Abstract #: 529

Author Name: Adam Leising

Author Company:

Second Author's Name:

**Abstract Title: Peer Effects within Homeowner Adoption of Solar-PV Panels: A Case-Control Study of Three Northern California Cities**

Abstract Text:

Peer Effects within Homeowner Adoption of Solar-PV Panels: A Case-Control Study of Three Northern California Cities Adam Parker Leising Stanford University Doctoral Dissertation June 2014 Abstract What motivates homeowners to install solar-photovoltaic (PV) panels on their roofs? In particular, how significant is it if a homeowner knows another homeowner who's already done it? In this case-control study of PV adopters and non-adopters from San Francisco, San Jose, and Fresno, I collected economic, environmental, and social information from nearly 200 homeowners in order to answer these questions. Outside of PV adoption, I found PV adopters to behave no more environmentally than do PV non-adopters. With regards to economic considerations, PV adoption is best predicted by whether the homeowner's expected PV electricity rate is less than his current PG&E electricity average rate. Concerning social influences, a homeowner who knows one more PV adopter than does the average homeowner has a probability of PV adoption that is two- to three-times that of the average homeowner. Driving this peer effect is an amplification of the environmental benefits of PV panels, not the acquisition of new or improved information. Policies that leverage this peer effect may serve as effective complements to traditional subsidization policies.