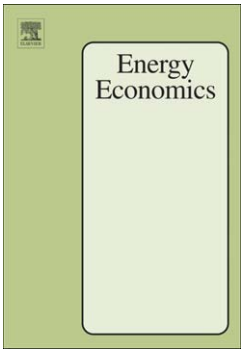

Soak up the sun: Impact of solar energy systems on residential home values in Arizona

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Soak up the sun: Impact of solar energy systems on residential home values in Arizona

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Abstract:

Recent increase of installations of solar energy systems on residential properties begs the question of whether such investments are being recognized by the market. Studies that estimate the impact of solar technologies on home values have been scarce. Using transaction and valuation data for a sample of residential properties in Arizona and matching methodology, results show that solar photovoltaics installation indeed has positive impacts on both house value and transaction prices. This is the first empirical study conducted in Arizona, a state of crucial importance for solar energy development with its abundant solar resources. In particular, properties with electricity-generating solar panels enjoy an average premium of approximately $45,000 (15% of medium home value) and transaction price premium of $28,000 (17% of medium home sales price). We do not find a statistically significant premium on homes with solar water heaters alone.

Key words:
Solar photovoltaics, solar water heater, residential house price, estimated market value

Classification codes: R31, Q20