



Explaining Spatial Variation in Small-scale Solar Uptake across Australia

Dr Paul Burke

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**Tuesday, 15 January 2019
2:00 to 3:30pm
ESI Conference Room
29 Heng Mui Keng Terrace
Block A, #10-01, Singapore 119620**

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Synopsis

Australia has among the highest rates of small-scale solar photovoltaic adoption in the world, with substantial geographical variation in uptake. Using postcode-level data up to September 2018, we quantify the impact of Australia's spatially-differentiated Small-scale Renewable Energy Scheme on solar uptake. We calculate a subsidy elasticity of small-scale solar capacity of around 1.1, which corresponds to around US\$37 per tonne of carbon dioxide emission abatement for the subsidy alone. Solar uptake is greater in postcodes with higher proportions of mortgage holders and middle-income households. Postcodes with more renters and apartment-dwellers have less uptake. There are strong spatial correlations in the data, even after controlling for a long list of factors explaining solar panel uptake. The findings are useful for informing grid management planning in Australia, and understanding how uptake may proceed in other countries.

This research is co-authored with Rohan Best (Macquarie University) and Shuhei Nishitateno (Kwansei Gakuin University).

About the Speaker

Dr Paul Burke is an Associate Professor at the Australian National University's Crawford School of Public Policy. Paul's research focuses on energy, the environment, transport, and the economies of the Asia-Pacific. He has published in journals including American Economic Journal: Macroeconomics, Economic Inquiry, Nature Geoscience, Nature Climate Change, and Global Environmental Change. In previous research he has examined the effects of Indonesia's fuel subsidy reforms on traffic jams, and of Indonesia's electricity subsidy reforms on electricity use efficiency.