

# Patrick Baylis

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## Education

- 2016 PH.D. in Agricultural and Resource Economics, University of California, Berkeley (expected May 2016)
  - Areas of specialization: Applied microeconomics, applied econometrics, environmental economics, climate change economics, energy economics
  - Dissertation Committee: **Max Auffhammer** (chair), **Severin Borenstein**, **Meredith Fowlie**, **Solomon Hsiang**
- 2012 M.S. in Agricultural and Resource Economics, University of California, Berkeley
- 2008 B.A. in Political Science/International Relations, Carleton College

## Job Market Paper

### [TEMPERATURE AND TEMPERAMENT: EVIDENCE FROM A BILLION TWEETS](#)

I combine observations from a geographically and temporally dense corpus of more than a billion Twitter status updates with sentiment analysis and machine learning algorithms in order to understand preferences for temperature, with implications for climate change.

## Work Experience

- 2011-2015 GRADUATE STUDENT RESEARCHER, Energy Institute at Haas
- 2009-2011 SUSTAINABILITY CONSULTANT, Ackerstein Sustainability
- 2008-2009 MANAGEMENT CONSULTANT, Arcadia Solutions

## Grants, Honors & Awards

- 2015 Giannini Foundation grant (joint with Judson Boomhower)
- 2013 Outstanding Graduate Student Instructor award
- 2008 Phi Beta Kappa, Carleton College
- 2006, 2007 Dean's list, Carleton College

## Research

### WORKING PAPERS

[DEFAULT EFFECTS, FOLLOW-ON BEHAVIOR AND WELFARE IN RESIDENTIAL ELECTRICITY PRICING PROGRAMS](#) (with **Peter Cappers**, **Meredith Fowlie**, **Anna Spurlock**, **Annika Todd**, and **Catherine Wolfram**)

- We study default effects in the context of a large randomized controlled trial of electricity pricing strategies. By comparing results from both opt-in and opt-out treatment groups, we are able to estimate the effect of the program on “complacent” customers, i.e., customers who only enroll in the program when placed in an opt-out treatment group.

### WORKS IN PROGRESS

[PROJECTING THE IMPACT OF CLIMATE CHANGE ON U.S. ELECTRICITY LOAD](#) (with **Max Auffhammer** and **Catherine Hausman**)

- Using a panel of disaggregated electricity demand consumption data that covers the entire United States, we link a statistically estimated relationship between temperature and load to a set of 20 climate models to simulate changes in future electricity demand.

[WILDFIRE AND ADAPTATION IN A CHANGING CLIMATE](#) (with **Judson Boomhower**)

- We exploit the exogenous shock of a wildfire to explore the efficiency of casualty insurance markets in the Wildland Urban Interface.

[CRITICAL GAS: MEASURING THE BICYCLE USAGE RESPONSE TO GAS PRICES](#)

- I construct estimates of the bike usage elasticity to changes in the price of gas, employing a novel panel dataset constructed from Google searches over time.

## Teaching

2013

GRADUATE STUDENT INSTRUCTOR, **ARE212: Multiple Equation Estimation**

- Graduate econometrics; Maximilian Auffhammer, instructor
- Section [material](#) applies economic theory to empirical data work using R
- Received Outstanding Graduate Student Instructor award

## Languages

### HUMAN

English (fluent), French (semi-fluent), Spanish (beginner)

### PROGRAMMING

R, Stata, Python, SQL, Julia, MATLAB, ArcGIS

## Presentations

- 2015
- October 23: UC-Berkeley (Energy Institute Seminar)
  - October 17: University of Illinois (Heartland Workshop)
  - September 25: UC-Berkeley (ARE Seminar)
  - September 4: University of Colorado (Vail Workshop)
  - July 15: UC-Berkeley (Climate Workshop)
  - July 13: UC-Berkeley (Energy Institute Research in Progress Seminar)
  - June 5: Associate of Environmental and Resource Economics Annual Conference (Sponsored presenter)
  - April 16: UC-Berkeley (Climate Change Economics Lunch)
- 2014
- October 27: UC-Berkeley (Energy Institute Research in Progress Seminar)
  - April 25: UC-Berkeley (Energy Institute Research in Progress Seminar)

## Service

ADMISSIONS COMMITTEE, Student representative, University of California Berkeley  
MEMBER, American Economic Association  
MEMBER, Association of Environmental and Resource Economists