Sébastien Houde
Associate Professor of Environmental Economics
Department of Economics, HEC Lausanne

Contact Information

Department of Economics,
Faculty of Business and Economics (HEC)
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Education

Stanford University, 2013
Ph.D. Management Science and Engineering
Department of Management Science and Engineering (MS&E)
Thesis: Managing Energy Demand with Standards and Information
Thesis Committee: James L. Sweeney (MS&E), Jonathan Levin (Economics), John P. Weyant (MS&E), Wesley Hartmann (GSB)

Université Laval, Québec, Canada, 2004
M.S. in Economics
Thesis: A Computable General Equilibrium Model for the Analysis of Canadian Climate Change Policies

Université Laval, Québec, Canada, 2003
B.A. in Economics and Mathematics

Research Interests

Environmental and Energy Economics, Public Economics, Industrial Organization, Innovation and Technology

Employment & Affiliations

08/2022 - Today	Associate Professor HEC Lausanne, Université de Lausanne
09/2019 - 07/2022	Associate Professor Grenoble Ecole de Management (GEM)
09/2020 -	Research Affiliate, CEPE at ETH Zurich
01/2015 -	Faculty Affiliate, The E2e Project
09/2017 - 08/2020	Senior Researcher, ETH Zurich
01/2008 - 08/2020	Adjunct Professor, University of Maryland, AREC.
01/2013 - 12/2017	Assistant Professor, University of Maryland, AREC.
01/2011 - 12/2012	Research Assistant for Prof. Lawrence Goulder, Stanford.
01/2006 - 08/2007	Research Assistant, Resources for the Future, Washington DC.
01/2005 - 12/2005	Policy Analyst, Natural Resources Canada, Ottawa, Canada.

Refereed Publications

Houde, S., "The Incidence of Coarse Certification: Evidence from the ENERGY STAR Program", Forthcoming at RAND Journal of Economics.

Houde, S. and E. Myers, "Heterogeneous (Mis-) Perceptions of Energy Costs: Implications for Measurement and Policy Design", Forthcoming at Journal of Political Economy: Micro-Economics.

Houde, S., and W. Wang, "The Incidence of the U.S.-China Solar Trade War", Forthcoming at Journal of the Association of Environmental and Ressource Economics.

Aja, P., L.G. Giraudet and S. Houde, "The (non-) disclosure of energy efficiency: The case of cooling technologies across Africa", Climate Change Economics (2024) Vol 15(2).

Wekhof, T., and Houde, S., "Using narratives to infer preferences in understanding the energy efficiency gap", Nature Energy (2023) Vol 8(9), Pages 965-977.

Houde, S.,"Bunching With the Stars: How Firms Respond to Environmental Certification", Management Science (2022) Vol 68(8), Pages 5569-5590.

Houde, S. and E. Myers, "Are Consumers Attentive to Local Energy Costs? Evidence from the Appliance Market", Journal of Public Economics (2021) Vol 201.

Gillingham, K., S. Houde, and A. Van Benthem. "Consumer Myopia in Vehicle Purchases: Evidence from a Natural Experiment", American Economic Journal: Economic Policy, (2021) Vol 13(3), Pages 207-238.

Houde, S., "How Consumers Respond to Product Certification and the Value of Energy Information", The RAND Journal of Economics, (2018) Vol 49(2), Pages 453-477.

Giraudet, L. G., S. Houde and J. Maher, "Moral Hazard and the Energy Efficiency Gap: Theory and Evidence", Journal of the Association of Environmental and Resource Economics, (2018) Vol 5(4), Pages 755-790.

Houde, S. and J. E. Aldy, "Consumers' Response to State Energy Efficient Appliance Rebate Programs", American Economic Journal: Economic Policy, (2017) Vol 9(4), Pages 227-255.

Houde, S. and C. A. Spurlock, "Minimum Energy Efficiency Standards for Appliances: Old and New Economic Rationales", Economics of Energy & Environmental Policy, (2016), Vol 5(2).

Fassbender, C., S. Houde, S. Silver-Balbus, K. Ballard, B. Kim, K. J. Rutledge, J. F. Dixon, A. A. M. Iosif, J. B. Schweitzer, S. M. McClure, "The Decimal Effect: Behavioral and Neural Bases for a Novel Influence on Intertemporal

Choice in Healthy Individuals and in ADHD", Journal of Cognitive Neuroscience, (2014), Pages 1-14.

Houde S., A. Todd, A. Sudarshan, J. F. Flora and C. K. Armel, "Real-time Feedback and Electricity Consumption: A Field Experiment Assessing the Potential for Savings and Persistence", The Energy Journal, (2013), Vol 34(1), Pages 87-102.

Safirova, E., K. Gillingham and S. Houde, "Measuring Marginal Congestion Costs of Urban Transportation: Do Networks Matter?", Transportation Research Part A: Policy and Practice, (2007), Vol 41(8), Pages 734-749.

Book Chapters

Houde, S., Managing energy demand with information-based policies in times of crises in *Peace not Pollution: How Going Green Can Tackle Climate Change and Toxic Politics.* Gollier, C., and D.Rohner editors. CEPR eBook, (2023).

Safirova E., S. Houde and W. Harrington, Spatial Development and Energy Consumption in *Urban and Regional Policy and its Effects, Vol 1.* Turner M.A., Wial, H. and Wolman H. editors. Bookings Institution Press. Washington, DC, (2008).

Working Papers

Houde S., C. Faure and J. Schleich, 2024 "The Moral Cost of Carbon", Working Paper.

Selected Work-in-Progress

Houde, S. and T. Wekhof, "Do Energy Efficiency Standards Improve Quality? Evidence from a Revealed Preference Approach".

Grants

2024-2027	Enabling a fair energy transition for low-income and vulnerable renters, OFEN, 737,700 CHF CHF, PI
2024-2027	Multidimensional Climate Risks, Project Funding SNSF Grant, 435,000 CHF, PI
2023-2024	Machine Learning for Green Buildings, E4S Grant, 85,000 CHF, PI
2020-2021	Closing the Swiss Energy Efficiency Gap, SNF Spark Grant, 100,000 CHF, PI
2019-2021	Barriers and Determinants to Energy Efficiency Investments in the Swiss Building Sector, SFOE, 240,000 CHF, Co-PI (with Massimo Filippini).
2016-2017	New Economics of Energy Markets, NBER, $23,000, 2016-2017, Co-PI (with Erica Myers).
2016-2017	Energy Policy Tradeoffs between Economic Efficiency and Distributional Equity, NBER and Sloan Foundation, 2015-2016, Co-PI (with Joseph Aldy).
2014	Minimum Standard and Market Structure, Lawrence Berkeley National Lab, $59,000.

Awards

2008-2010	Social Sciences and Humanities Research Council Doctoral Fellowship.
2007	Stanford School of Engineering Fellowship.
2003	Mention of Honors, Faculty of Graduated Studies, University Laval.
2003	GREEN/Environment Québec Fellowship , University Laval.

Professional Activities: Referee Services

Journal Referee: American Economic Review, Review of Economic Studies, Quarterly Journal of Economics, Review of Economics and Statistics, American Economic Journal: Economic and Policy, American Economic Journal: Applied Economics, Journal of Public Economics, RAND Journal of Economics, International Journal of Industrial Organization, Journal of the Association of Environmental and Resource Economics, Energy Journal, Journal of Environmental Economics and Management, Journal of Industrial Ecology, Energy Economics, Economic Inquiry, Journal of Economic Behavior and Organization, Nature, Swiss National Science Foundation.

Teaching

Environmental and Energy Economics, 2014, 2016 (Undergraduate level, University of Maryland).

Advanced Natural Resource Economics, 2014, 2015, 2016 (PhD level, University of Maryland).

Microeconomic Applications in Agricultural and Resource Markets, 2015 (PhD level, University of Maryland).

Frontiers in Applied Econometrics: Methods and Applications in Environmental and Energy Economics, 2018 (PhD level ETH, co-taught with Meredith Fowlie).

Advanced Empirical Methods in Environmental and Energy Economics, 2019 (PhD level ETH, co-taught with William Green and Massimo Filippini).

Méthodes d'Aides à la Décision, 2019, 2020, 2021 (Core Statistics Class for Management Students) (Undergraduate & Master level, GEM).

Décisions Avancées, 2019 (Advanced Quantitative Methods Class for Management Students) (Master level, GEM).

Les Défis des Entreprises Face aux Changements Climatiques, 2020, 2021 (Management Class in Climate Change Economics) (Undergraduate level, GEM).

Energy Economics for Managers, 2021 (Master & Executive level, GEM).

Environmental Economics 2022-Today (Bachelor & Master, HEC Lausanne).

Conferences & Presentations

2023 AERE Annual Conference; Institut Henri Pointcarré, Paris Dauphine, FAU Erlangen-Nürnberg.

2022 LSE/Imperial College Workshop in Environmental Economics; HEC Lausanne; University of St-Gallen.

2021 EAERE Annual Conference; ETH Zurich; Berkeley-Harvard-Yale Energy and Environmental Economics Seminar.

2020 EAERE Annual Conference, Online; Université Paris Nanterre, Paris; Pan-institute Series of Webinars in Economics of Environment, Energy and Transports (SWEEET).

2019 Empirical Methods in Energy Economics, Québec City (organizer); 1st Workshop on Climate Economics, Innovation, and Policy, University of Ottawa (invited speaker).

2018 Mannheim Energy Conference (keynote speaker); 8th Atlantic Workshop on Energy and Environmental Economics (invited speaker); US-AEE Conference, Washington DC (invited speaker); Ecole des Mines, Paris; Harvard Kennedy School; Yale University, Toulouse School of Economics; London School of Economics; University of Manchester.

2017 Imperial College, London; University of Basel; ASSA, Chicago; RFF, Washington DC; NBER Conference on Energy Markets, Washington DC; CEPE-ETH, Zurich; EAERE Summer Conference, Athens; University of Glasgow; Munster.

2016 NBER Conference on Efficiency-Equity Trade-Off, North Carolina; AERE Summer Conference, Colorado; Recent Advances in the Economic Analysis of Energy Demand Insights for Industries and Households, Munster Germany; Howard Baker Center for Public Policy, University of Tennessee, Knoxville; Behavior and Climate Change Conference, Baltimore; US Department of Energy, Washington DC.

2015 ASSA Boston; Colorado School of Mines, Colorado; Stanford Institute Theoretical for Economics, Stanford; University of Alberta, Alberta; University of Calgary, Alberta; POWER Conference, Energy Institute at Haas, University of California Berkeley.

2014 ASSA Philadelphia; NBER Summer Institute, Cambridge MA; Universite Laval, Quebec; International Industrial Organization Society Annual Meeting, Chicago; European Econometric Society Annual Meeting, Toulouse.

2013 Energy Institute, University College London; Fondazione Eni Enrico Mattei, Milan; CIRED, Ecole des Ponts ParisTech, Paris; CEPE-ETH, Zurich; ARE, UC Davis; TREE Seminar Series, NC State University, RTI International and Duke University; Harvard University, Energy Efficiency Gap workshop; Department of Energy; National Center for Environmental Economics, US EPA; ASSA San Diego; Stanford Institute for Theoretical Economics, Stanford; AERE summer conference, Banff; NBER Summer Institute, Cambridge MA.

PhD Student Advising

Julien Lafaille, 2020- (primary, GEM)	Ongoing
Tobias Wekhof, 2019-2022 (ETH)	ETH-UZH Post-Doc
Guanghui Que, 2014-2018 (primary, Maryland)	State Grid Corporation of China
Wenjun Wang, 2016-2018 (primary, Maryland)	Agricultural Bank of China
Zheng (Jen) He, 2014-2017 (primary, Maryland)	Ernest & Young
Aaron Ashok Adalja, 2014 2017 (primary, Maryland)	Cornell University
Daniel Werner, 2013-2014 (primary, Maryland)	On-Point Analytics
Sarah Ball, 2013-2014 (Maryland)	NOAA
Shirley Pon, 2013-2014 (Maryland)	NMR Group Inc.
Ron Chan, 2014 (Maryland)	University of Manchester
Yichen (Christy) Zhou, 2014 (Maryland)	RFF & Clemson University
Joe Maher, 2014-2016 (Maryland)	GAO

Academic Services at UMD, ETH, GEM, HEC

Search committee: open rank faculty AREC (2016, UMD)

Faculty Mentor for the First-Year Innovation Research Experience (FIRE) program (01/2015 - 12/2017, UMD)

Lead organizer reading group in machine learning and econometrics (09/2018 - 07/2019, ETH)

Co-Organiser: workshops on Empirical Methods in Energy Economics in Québec City and Zurich (July 17-18 2019, January 13-14 2020)

Co-Organiser of SWEEEP: A pan-institute Series of Webinars in Environmental and Energy Economics and Policy (09/2020 -)

Academic lead for a new executive education program on energy economics (ongoing, GEM)

Responsible for the development of a new undergraduate academic program on climate change champions for organizations (GEM)

Co-Director Master Program in Economics (HEC)

Extension, Outreach, & Advising

I am an applied researcher and my goal is to contribute to solving society most pressing problems, especially when it comes to energy and sustainability issues. Throughout my academic career, I have made effort to reach out to organizations at the local, national, and international levels to disseminate my research and establish collaborations to conduct high-impact studies. Below, you will find a selected sample of organizations that I have been working with.

Organization	Project
Swiss Federal Office of Energy	Research & policy briefing
Minergie Association	Design of experiments
U.S. Department of Energy	Design of energy efficiency programs
U.S. Environmental Protection Agency	Evaluation of the Energy Star program
Lawrence Berkeley National Lab	Evaluation of minimum energy efficiency standard
Google	Design of experiments for an energy feedback application
The Fuel Fund of Maryland	Program evaluation of energy bill assistance