

ARTHUR VAN BENTHEM

arthurv@wharton.upenn.edu
<http://www.arthurvanbenthem.com>

Department of Business Economics and Public Policy
The Wharton School, University of Pennsylvania
1354 Steinberg Hall-Dietrich Hall, 3620 Locust Walk, Philadelphia, PA 19104
Phone: +1 (215) 898-3013

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ACADEMIC POSITIONS

Assistant Professor of Business Economics and Public Policy, The Wharton School, University of Pennsylvania, 2012 – present

National Bureau of Economic Research, Faculty Research Fellow, 2013 – present

Centre for Economic Policy Research, Research Affiliate, 2014 – present

Faculty Fellow, Kleinman Center for Energy Policy, University of Pennsylvania, 2017 – present

EDUCATION

Ph.D. in Economics, Stanford University, 2012

Dissertation: “*Unintended Consequences from Environmental Legislation*”

M.S. in Management Science & Engineering, Stanford University, 2005

Specialization in Energy Economics and Policy

M.S. in Econometrics, University of Amsterdam, 2003 (cum laude)

B.S. in Econometrics and Operations Research, University of Amsterdam, 2003 (cum laude)

Minor in Earth Sciences

FIELDS OF SPECIALIZATION

Applied Microeconomics, Public Economics, Environmental Economics, Energy Economics

EXTERNAL EXPERIENCE

- 2014- Member of Advisory Council, Smartkarma Holdings
- 2006-07 Energy Economist, Shell Long-Term Energy Scenarios Team, Royal Dutch Shell, The Hague, Netherlands
- 2005 Quantitative Analyst, Shell Energy Europe, The Hague, Netherlands
- 2003 Research Internship, Shell Hydrogen, Amsterdam, Netherlands
- 2002-03 Evening Stock Trader, IMC Trading, Amsterdam, Netherlands

PUBLICATIONS

- VAN BENTHEM, A.A., 2015, “What Is the Optimal Speed Limit on Freeways?”, *Journal of Public Economics* 124: 44 – 62.
- JACOBSEN, M.R. AND A.A. VAN BENTHEM, 2015, “Vehicle Scrappage and Gasoline Policy”, *American Economic Review* 105(3): 1312 – 1338.
- VAN BENTHEM, A.A., 2015, “Energy Leapfrogging”, *Journal of the Association of Environmental and Resource Economists* 2(1): 93 – 132.
- VAN BENTHEM, A.A. AND S. KERR, 2013, “Scale and Transfers in International Emissions Offset Programs”, *Journal of Public Economics* 107: 31 – 46.
- STROEBEL, J.C. AND A.A. VAN BENTHEM, 2013, “Resource Extraction Contracts Under Threat of Expropriation: Theory and Evidence”, *The Review of Economics and Statistics* 95(5): 1622 – 1639.
- STROEBEL, J.C. AND A.A. VAN BENTHEM, 2013, “Investment Treaties and Hydrocarbon Taxation in Developing Countries”, in C. Fuest and G.R. Zodrow (eds.), *Critical Issues in Taxation and Development*, Cambridge, MA: The MIT Press, 83 – 106.
- GOULDER, L.H., M.R. JACOBSEN AND A.A. VAN BENTHEM, 2012, “Unintended Consequences from Nested State & Federal Regulations: The Case of the Pavley Greenhouse-Gas-per-Mile Limits”, *Journal of Environmental Economics and Management* 63(2): 187 – 207.
- NOWLIS, J.S. AND A.A. VAN BENTHEM, 2012, “Do Property Rights Lead to Sustainable Catch Increases?”, *Marine Resource Economics* 27 (1): 89 – 105.
- VAN BENTHEM, A.A. AND M. ROMANI, 2009, “Fuelling Growth: What Drives Energy Demand in Developing Countries?”, *The Energy Journal* 30(3): 91 – 114.

VAN BENTHEM, A.A., K. GILLINGHAM AND J.L. SWEENEY, 2008, “Learning-by-Doing and the Optimal Solar Policy in California”, *The Energy Journal* 29(3): 131 – 151.

VAN BENTHEM, A.A., G.J. KRAMER AND R. RAMER, 2006, “An Options Approach to Investment in a Hydrogen Infrastructure”, *Energy Policy* 34(17): 2949 – 2963.

WORKING PAPERS

JACOBSEN, M.R., C.R. KNITTEL, J.M. SALLEE AND A.A. VAN BENTHEM, “Sufficient Statistics for Imperfect Externality-Correcting Policies”, latest draft: February 2016.

SHAPIRO, J.S. AND A.A. VAN BENTHEM, “Transportation and Pollution Havens: Evidence from the U.S. Vehicle Market”, latest draft: June 2016.

JAAKKOLA, N., D. SPIRO AND A.A. VAN BENTHEM, “FINDERS, KEEPERS?”, latest draft: February 2017.

J. PLESS AND A.A. VAN BENTHEM, “The Surprising Pass-Through of Solar Subsidies”, latest draft: February 2017.

WORK-IN-PROGRESS

GILLINGHAM, K., S. HOUDE AND A.A. VAN BENTHEM, “How Do Automakers Decide on Fuel-Economy Advertising?”.

TEACHING EXPERIENCE

- 2013-16 Energy Markets and Policy (BEPP/OIDD 763), MBA level (Wharton)
Energy Markets and Policy (BEPP/OIDD 763X), WEMBA level (Wharton)
Environmental & Energy Economics and Policy (BEPP/OIDD 263), UG (Wharton)
- 2010 Teaching Assistant for Prof. S. Kerr, Stanford University, Environmental Economics and Policy (teaching rating 4.8/5.0)
- 2007 Design and teaching of the interdisciplinary honors course for Masters students “From Scientific Reasoning to Public Debate: The Case of Sustainable Energy”, University of Amsterdam, led by Prof. L. Fresco
- 2000-01 Teaching Assistant for Prof. R. Ramer, University of Amsterdam, Linear Algebra and Multivariate Calculus
- 1999 Teaching Assistant for Prof. J.G. de Gooijer, University of Amsterdam, Exploratory Data Analysis

SCHOLARSHIPS, HONORS AND AWARDS

- 2016 *Teaching Commitment and Curricular Innovation Award* for the design and teaching of

- the MBA-level course Energy Markets and Policy at Wharton
- 2011-12 *Leonard W. Ely and Shirley R. Ely Graduate Student Fellowship*, dissertation completion fellowship, Stanford Institute for Economic Policy Research
- 2010 *USAEE/LAEE Best Working Paper Award*, for the paper “Resource Extraction Contracts Under Threat of Expropriation: Theory and Evidence”
- 2010 *Outstanding Teaching Assistant Award*, Economics Department, Stanford University
- 2007-10 *Stanford University Graduate Fellowship* and *Prins Bernhard Cultuurfondsbeurs* for graduate studies in Economics
- 2006-07 *Special Recognition Awards* for the development of the World Energy Model (2006) and the Shell Energy Scenarios (2007), Shell International
- 2005 Award for *Outstanding Academic Achievement at the Graduate Level*, for highest GPA in the Department of Management Science and Engineering, Stanford University
- 2004-05 *Fulbright-Citibank Scholarship*, *Award for Talented Students* (Dutch Ministry of Education), and *VSB Scholarship*, for graduate study in the United States
- 2004 *Thesis Awards for Greatest Academic Achievements*, second prize, University of Amsterdam
- 2000-01 *Bonusbeurs* scholarship University of Amsterdam, Earth Sciences
- 1998 National awards, Dutch Association of Chemical Industry NVCi and Dutch Classics Association NKV, for outstanding exams in chemistry and Latin

GRANTS

Kleinman Center for Energy Policy grant, for research on the efficiency of new vehicle emissions standards, University of Pennsylvania, 2016 (\$6,000)

Dean’s Research Fund, for research on how to improve vehicle emissions policies, The Wharton School, 2016 (\$50,000).

Dean’s Research Fund, for research on how automakers advertise on fuel economy, The Wharton School, 2016, with Kenneth Gillingham and Sebastien Houde (\$10,000)

National Science Foundation award, research project “Leakage from Environmental Regulation: Evidence from Smog Check and Used Vehicle Trade”, 2015-2018, with Joseph Shapiro (\$426,357)

Kleinman Center for Energy Policy grant, for research on automakers’ decisions about how to advertise on fuel-economy, University of Pennsylvania, 2015 (\$15,000)

Dean’s Research Fund, for research on sufficient statistics for externality correcting policies, The Wharton School, 2015, with Mark Jacobsen, Chris Knittel and Jim Sallee (\$7,500)

Kleinman Center for Energy Policy grant, to support guest speaker expenses for courses, The Wharton School, 2015 (\$2,500)

Dean’s Research Fund, for research on leakage in used vehicle markets, The Wharton School, 2014, with Joseph Shapiro (\$10,000)

Institute for Global Environmental Leadership grant, for research on the European Union's Emissions Trading Scheme, The Wharton School, 2014, with Sanjay Patnaik (\$10,000)

Initiative on Global Markets, for research on asymmetric information in used vehicle markets, University of Chicago, Booth School of Business, 2013, with Johannes Stroebe (€13,150)

Institute for Global Environmental Leadership grant, for research on unintended consequences of environmental legislation, The Wharton School, 2012, with Johannes Stroebe (€10,000)

Dean's Research Fund, for research on asymmetric information in used vehicle markets, The Wharton School, 2012, with Johannes Stroebe (€5,000)

Shultz Graduate Student Fellowship, for the acquisition of California infant health data, Stanford Institute for Economic Policy Research, 2012 (\$3,000)

CONFERENCE AND SEMINAR PRESENTATIONS

2017 Colorado School of Mines, University of Cambridge, University of Oxford, University of Pennsylvania (Energy Economics & Finance seminar), VU Amsterdam

2016 ASSA Conference (San Francisco), UC Berkeley (Energy Institute at Haas), UC Berkeley (Agricultural and Resource Economics), Stanford MS&E, Yale, UC San Diego, University of Pennsylvania (EnerFront seminar), University of Virginia

2015 AERE Conference (San Diego), ASSA Conference (Boston), INSEAD, London School of Economics/University College London (joint seminar), Imperial College London, Toulouse School of Economics, Wharton IGEL, Northeast Workshop in Environmental Economics (Yale), MIT CEEPR

2014 IAEE Conference (New York), AERE/EAERE Conference (Istanbul), UC Berkeley (Energy Institute at Haas), ETH Zurich, VU Amsterdam, LMU Munich, Resources for the Future, Fordham University

2013 Yale FES, NBER EEE (Boston), AERE Conference (Banff), UC Berkeley (Energy Institute at Haas), EAERE Conference (Toulouse), IAEE Conference (Düsseldorf), Duke/NCSU, Wharton IGEL, World Bank, University of Texas at Austin

2012 Columbia University (School of International and Public Affairs), London School of Economics, European Bank for Reconstruction and Development, University of Chicago (Harris School of Public Policy Studies), The Wharton School, UC Berkeley (Haas School of Business), UC Davis (ARE), University of Maryland (ARE), Toulouse School of Economics, Sciences Po, Universitat Pompeu Fabra, University of Oxford, Cornell University, USAEE North American Conference (Austin, TX), University of Michigan, World Bank

- 2011 World Bank – Development Research Group, Resources for the Future
- 2010 UC Berkeley (Energy Institute at Haas), Occasional Workshop on Environmental and Resource Economics (UC Santa Barbara)
- 2009 IAEE International Conference (San Francisco)
- 2007 IAEE European Conference (Florence), Shell Long-Term Energy Scenarios Conference (The Hague)
- 2006 IAEE International Conference (Berlin), British Institute for Energy Economics Conference (University of Oxford)

REFEREEING

American Economic Review, American Economic Journal: Applied Economics, American Economic Journal: Economic Policy, Climate Change Economics, Climatic Change, Energy Economics, Journal of Environmental Economics and Management, Journal of Policy Analysis and Management, Journal of Public Economics, Journal of the Association of Environmental and Resource Economists, Journal of Urban Economics, Nature Energy, Oxford Development Studies, Resource and Energy Economics, Review of Economic Dynamics, Review of Economics and Statistics, The Energy Journal

DOCTORAL STUDENTS

1. Jacquelyn Pless, Colorado School of Mines, first placement: University of Oxford (postdoc)
2. Jin Soo Han, Wharton (expected graduation year: 2017)

MEDIA

1. Prof. Arthur van Benthem Talks About the Intersection of Corporate Strategy and Government Policy in Energy, *Wharton website*, 1/24/2017
2. Prof. Arthur van Benthem Examines Energy and Environmental Markets Through an Economist’s Lens, *Wharton website*, 1/24/2017
3. When Will Electric Cars Go Mainstream?, *Knowledge@Wharton*, 1/6/2017
4. Time for corporate America to stand up for the environment, *The Boston Globe*, 12/2/2016
5. Why Trump Should Embrace – Not Ditch – Green Energy, *Knowledge@Wharton*, 12/2/2016
6. Solar and Wind Power Are Growing – but Won’t Solve Climate Change, *Knowledge@Wharton*, 10/10/2016
7. Innovative Finance: Mobilizing Capital for Maximum Impact?, *Knowledge@Wharton*, 8/19/2016
8. Will a New Vision for Saudi Arabia Work?, *Knowledge@Wharton*, 5/18/2016

9. As speed limits rise on Pa. highways, fuel economy falls, *Pittsburgh Post-Gazette PowerSource*, 5/10/2016
10. Repareer de emissiehandel; de rest is gerommel in de marge, *NRC Handelsblad*, 4/22/2016
11. Europa, doe als Californië en voer een minimumprijs voor CO2 in, *FluxEnergie*, 4/22/2016
12. How Shell Is Preparing for the Energy Sector's 'New Normal', *Knowledge@Wharton*, 3/29/2016
13. UPenn Students Say Collaborate to Innovate, *Royal Dutch Shell website*, 3/4/2016
14. Marvin Odum, President of Shell Oil Company, Discusses Energy for Today and Tomorrow, *Wharton Public Policy Initiative Event Recap*, 3/3/2016 (youtube: <https://www.youtube.com/watch?v=ZOTVSEHzxOM>)
15. Incentive for electric cars increases CO₂ pollution, *Chemical & Engineering News*, 3/4/2016
16. New CAFE Standards: The Good, the Bad and the Ugly, *Energy Institute at Haas Blog*, 1/25/2016
17. Europe's carbon-trading system is better than thought, and could be better still, *The Economist*, 12/11/2015
18. Governments do not know the best way to save the Amazon rainforest. And that needs to change, *The Economist*, 11/16/2015
19. Quelles politiques publiques pour sauver la forêt amazonienne?, *Le Monde*, 11/5/2015
20. How Attractive Are Fuel-Economy Standards?, *Kleinman Center for Energy Policy Policy Brief*, 9/30/2015
21. Can fuel-economy standards save the climate?, *The Economist*, 7/16/2015
22. Climat: la taxe sur les carburants plus efficace que les normes, *Le Monde*, 7/16/2015
23. Can the World Run on Renewable Energy?, *Knowledge@Wharton*, 4/23/2015
24. The case for lower speed limits, *Vox*, 4/9/2015
25. The Unintended Consequences of Ambitious Fuel-economy Standards, *Knowledge@Wharton*, 2/3/2015
26. Beyond the Gas Pump: A New World Order for Oil, *Knowledge@Wharton*, 1/22/2015
27. Leapfrog or Backfire?, *The Breakthrough*, 11/18/2014
28. Big Data and Energy: A Clear Synergy, *Knowledge@Wharton*, 9/12/2014
29. The Impact of 'Energy Leapfrogging' on Future Consumption, *Knowledge@Wharton*, 1/16/2014
30. Mexico: Opening Up 'One of the World's Most Closed' Energy Sectors, *Knowledge@Wharton*, 10/29/2013
31. Vehicle Scrappage and Gasoline Policy, *NBER Digest*, 8/1/2013
32. The Transportation Nexus: Ethanol Is a 'Food vs. Fuel' Issue, *Knowledge@Wharton*, 7/10/2013
33. Do Lower Speed Limits Cost Society Less?, *RegBlog*, 6/27/2013
34. How the used-car market could undermine Obama's fuel-economy rules, *The Washington Post*, 5/26/2013
35. Getting to Green – New Tools and Policies Boost Sustainable Building, *Knowledge@Wharton*, 5/6/2013
36. Fuel Economy Standards and Used Cars, *Energy Institute at Haas Blog*, 4/8/2013
37. Slippery Negotiations: The Give and Take of Oil Contracts in Foreign Countries, *Knowledge@Wharton*, 11/20/2012
38. Oil price risk, expropriation and bilateral investment treaties, *VoxEU*, 10/21/2012

39. Ölpreis und Enteignungsrisiko, *Ökonomenstimme*, 4/11/2012
40. Rasen schadet der Gesundheit, *Handelsblatt*, 3/15/2012
41. The new auto fuel-efficiency standards – going beyond the headlines, *Grist*, 5/22/2009
42. Learning-by-Doing and the California Solar Initiative, *RFF Weekly Policy Commentary*, 11/10/2008

PROFESSIONAL MEMBERSHIPS

American Economic Association (AEA), Association of Environmental and Resource Economists (AERE), European Association of Environmental and Resource Economists (EAERE), International Association of Energy Economics (IAEE), Alliance for Research on Corporate Sustainability (ARCS)

PERSONAL

Dutch Citizen. Married to Siemone Griffioen on 09/06/2008. Two children: Steven (02/10/2012) and Laura (12/04/2014). Interested in energy, transportation, environmental issues, renewables, politics, economic policy, hiking and soccer.