

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

January 2018

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

Affiliate Member, CESifo, 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, “The Use of Regression Statistics to Analyze Imperfect Pricing Policies”. Revised & Resubmitted to *Journal of Political Economy*.

JAANKOLA, N., D. SPIRO AND A.A. VAN BENTHEM, “Finders, Keepers?”, Revise & Resubmit at *Journal of Public Economics*.

HAN, J.S., J.F. HOUDE, A.A. VAN BENTHEM AND J.M. ABITO, “Deregulation and Fuel Cost Savings: The Role of Fuel Switching, Bargaining and Contracts”, latest draft: December 2017.

PLESS, J. AND A.A. VAN BENTHEM, “Pass-Through as a Test for Market Power: An Application to Solar Subsidies”, latest draft: October 2017.

SHAPIRO, J.S. AND A.A. VAN BENTHEM, “Transportation and Pollution Havens: Evidence from the U.S. Vehicle Market”, latest draft: December 2015.

WORK-IN-PROGRESS

JACOBSEN, M.R., J.M. SALLEE, J.S. SHAPIRO AND A.A. VAN BENTHEM, “Optimal Corrective Taxes with Untaxable Externalities: Evidence from Motor Vehicle Pollution”.

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

TEACHING EXPERIENCE

- 2013-18 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

2017 *Top 40 Undergraduate Business School Professors*, Poets & Quants for Undergrads
2017 *Excellence in Teaching Award for the Undergraduate Division* for the undergraduate level course Energy & Environmental Economics and Policy at Wharton
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

Dean’s Research Fund, for research on solar subsidy pass-through, The Wharton School, 2017 (\$10,000)

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 Stroebel (\$13,150)

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

Dean's Research Fund, for research on asymmetric information in used vehicle markets, The Wharton School, 2012, with Johannes Stroebel (\$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

- 2018 ASSA Conference (Philadelphia), Michigan State University, International Monetary Fund, University of Pennsylvania (Energy Economics & Finance seminar)
- 2017 AERE Conference (Pittsburgh), Colorado School of Mines, Cornell University, National Tax Association Conference (Philadelphia), Northeast Workshop in Environmental Economics (Dartmouth), UC Berkeley (Energy Institute at Haas), University of Cambridge, University of Oxford, University of Pennsylvania (Energy Economics & Finance seminar), VU Amsterdam, World Bank
- 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), Cornell University, 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, 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, Scandinavian Journal of Economics, Sloan Foundation, The Energy Journal

DOCTORAL STUDENTS

1. Jacquelyn Pless, Colorado School of Mines, graduation year 2016, first placement: University of Oxford (postdoc)
2. Jin Soo Han, Wharton, graduation year: 2017, first placement: first postdoc at Cornell University, then Korea Military Academy.

Informal:

3. Hongyu Xiao, Wharton (expected graduation year: 2019)
4. Bo Cheng, Wharton (expected graduation year: 2019)
5. Gabrielle Vasey, Economics (expected graduation year: 2020)
6. Felipe Flores-Golfin, Wharton (expected graduation year: 2021)

MEDIA

1. Do States Have a Role in Making Climate Policy? *Wall Street Journal*, 11/14/2017
2. 2017 Top 40 Undergraduate Professors, *Poets and Quants for Undergrads*, 9/18/2017
3. The Trump Effect, *Wharton Magazine*, Spring 2017
4. China charging ahead into 'cleantech' future, *Philadelphia Inquirer*, 4/19/2017 (re-posted by Arizona Daily Sun)
5. Opkomst Trump markeert voorlopig einde van rol groen rechts Amerika, *Het Financieele Dagblad*, 3/21/2017
6. Don't just roll back fuel standards — end them, Bloomberg View, 3/14/2017 (re-posted by The Denver Post, StarTribune and Bangor Daily News)
7. The flawed logic of Trump's order on regulations, *Philadelphia Inquirer*, 2/20/2017 (re-posted by *Online Athens*) (re-posted in *Online Athens*)
8. Motståndet mot Trump ger ny energi till kampen för vattnet, *Dagens Nyheter*, 2/19/2017
9. Prof. Arthur van Benthem Talks About the Intersection of Corporate Strategy and Government Policy in Energy, *Wharton website*, 1/24/2017
10. Prof. Arthur van Benthem Examines Energy and Environmental Markets Through an Economist's Lens, *Wharton website*, 1/24/2017
11. When Will Electric Cars Go Mainstream?, *Knowledge@Wharton*, 1/6/2017
12. Time for corporate America to stand up for the environment, *The Boston Globe*, 12/2/2016
13. Why Trump Should Embrace – Not Ditch – Green Energy, *Knowledge@Wharton*, 12/2/2016
14. Solar and Wind Power Are Growing – but Won't Solve Climate Change, *Knowledge@Wharton*, 10/10/2016
15. Innovative Finance: Mobilizing Capital for Maximum Impact?, *Knowledge@Wharton*, 8/19/2016
16. Will a New Vision for Saudi Arabia Work?, *Knowledge@Wharton*, 5/18/2016
17. As speed limits rise on Pa. highways, fuel economy falls, *Pittsburgh Post-Gazette PowerSource*, 5/10/2016
18. Repareer de emissiehandel; de rest is gerommel in de marge, *NRC Handelsblad*, 4/22/2016
19. Europa, doe als Californië en voer een minimumprijs voor CO2 in, *FluxEnergie*, 4/22/2016

20. How Shell Is Preparing for the Energy Sector's 'New Normal', *Knowledge@Wharton*, 3/29/2016
21. UPenn Students Say Collaborate to Innovate, *Royal Dutch Shell website*, 3/4/2016
22. 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=ZOTVSEHzzxOM>)
23. Incentive for electric cars increases CO₂ pollution, *Chemical & Engineering News*, 3/4/2016
24. New CAFE Standards: The Good, the Bad and the Ugly, *Energy Institute at Haas Blog*, 1/25/2016
25. Europe's carbon-trading system is better than thought, and could be better still, *The Economist*, 12/11/2015
26. Governments do not know the best way to save the Amazon rainforest. And that needs to change, *The Economist*, 11/16/2015
27. Quelles politiques publiques pour sauver la forêt amazonienne?, *Le Monde*, 11/5/2015
28. How Attractive Are Fuel-Economy Standards?, *Kleinman Center for Energy Policy Policy Brief*, 9/30/2015
29. Can fuel-economy standards save the climate?, *The Economist*, 7/16/2015
30. Climat: la taxe sur les carburants plus efficace que les normes, *Le Monde*, 7/16/2015
31. Can the World Run on Renewable Energy?, *Knowledge@Wharton*, 4/23/2015
32. The case for lower speed limits, *Vox*, 4/9/2015
33. The Unintended Consequences of Ambitious Fuel-economy Standards, *Knowledge@Wharton*, 2/3/2015
34. Beyond the Gas Pump: A New World Order for Oil, *Knowledge@Wharton*, 1/22/2015
35. Leapfrog or Backfire?, *The Breakthrough*, 11/18/2014
36. Big Data and Energy: A Clear Synergy, *Knowledge@Wharton*, 9/12/2014
37. The Impact of 'Energy Leapfrogging' on Future Consumption, *Knowledge@Wharton*, 1/16/2014
38. Mexico: Opening Up 'One of the World's Most Closed' Energy Sectors, *Knowledge@Wharton*, 10/29/2013
39. Vehicle Scrappage and Gasoline Policy, *NBER Digest*, 8/1/2013
40. The Transportation Nexus: Ethanol Is a 'Food vs. Fuel' Issue, *Knowledge@Wharton*, 7/10/2013
41. Do Lower Speed Limits Cost Society Less?, *RegBlog*, 6/27/2013
42. How the used-car market could undermine Obama's fuel-economy rules, *The Washington Post*, 5/26/2013
43. Getting to Green – New Tools and Policies Boost Sustainable Building, *Knowledge@Wharton*, 5/6/2013
44. Fuel Economy Standards and Used Cars, *Energy Institute at Haas Blog*, 4/8/2013
45. Slippery Negotiations: The Give and Take of Oil Contracts in Foreign Countries, *Knowledge@Wharton*, 11/20/2012
46. Oil price risk, expropriation and bilateral investment treaties, *VoxEU*, 10/21/2012
47. Ölpreis und Enteignungsrisiko, *Ökonomenstimme*, 4/11/2012
48. Rasen schadet der Gesundheit, *Handelsblatt*, 3/15/2012
49. The new auto fuel-efficiency standards – going beyond the headlines, *Grist*, 5/22/2009
50. 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), Alliance for Research on Corporate Sustainability (ARCS), European Association of Environmental and Resource Economists (EAERE), International Association of Energy Economics (IAEE), National Tax Association (NTA)

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.