

Curriculum Vitae

Jan Abrell

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Current Position

Since 02/2021 **Senior Researcher**
Department of Environmental and Resource Economics, Environmental
Management, ZEW Leibniz Centre for European Economic Research,
Mannheim, Germany

Previous appointments

08/2018 – 06/2020 **Senior Lecturer**
Zurich University of Applied Science, Center for Energy and the Environment,
School of Management and Law, Winterthur, Switzerland

12/2015 – 12/2018 **Senior Lecturer**
ETH Zurich, Center for Energy Policy and Economics, Chair of
Economics/Energy Economics, Zurich, Switzerland

02/2013 – 11/2015 **Post-Doctoral Researcher**
ETH Zurich, Center for Energy Policy and Economics, Chair of
Economics/Energy Economics, Zurich, Switzerland

11/2011 – 02/2013 **Scientific Officer**
European Commission, Joint Research Center (JRC), Institute for Prospective
Technology Studies (IPTS), Economics of Climate Change, Energy and
Transport Unit, Seville, Spain

02/2010 – 09/2011 **Post-Doctoral Researcher**
Dresden University of Technology, Chair of Energy Economics and Public
Sector Management, Dresden, Germany

02/2010 – 09/2011 **Visiting Researcher**
German Institute of Economic Research, Berlin, Germany

Previous appointments (cont.)

- 12/2005 – 11/2009 **Research Associate**
Dresden University of Technology, Chair of Energy Economics and Public Sector Management, Dresden, Germany
- 04/2004 – 09/2005 **Teaching Assistant**
Goethe-University, Chair of Industrial Organization, Frankfurt am Main, Germany

Education

- 12/2005 – 07/2010 **PhD in Economics** (Dr. rer. pol.) with highest distinction (summa cum laude)
Dresden University of Technology, Germany
Dissertation: Transport under Emission Trading - A Computable General Equilibrium Analysis
Committee: Prof. Dr. Christian von Hirschhausen,
 Prof. Dr. Georg Hirte
Date of thesis defense: 12/07/2010
- 10/2004 – 10/2005 **PhD Program in Economics**
Goethe-University, Frankfurt am Main, Germany
- 04/2000 – 09/2004 **Diplom Volkswirt** (equivalent M.Sc. in Economics)
Goethe-University, Frankfurt am Main, Germany
- 08/1997 – 02/2000 **Apprenticeship Restaurant Management**
Hotel Hessischer Hof, Frankfurt am Main, Germany

Miscellaneous

- Reviewing Climate Policy, Economic Modeling, Energy Economics, Energy Journal, Energy Policy, Environmental and Resource Economics, European Economic Review, European Journal of Operational Research, Journal of the Association of Environmental and Resource Economists, Journal of Environmental Economics and Management, Journal of Public Economics, Nature Climate Change, Networks and Spatial Economics, Resource and Energy Economics, Scandinavian Journal of Economics, for Strategic Behavior and the Environment, Technological Forecasting and Social Change, Transportation Research Part D, Transportation Science, Swiss Journal of Economics and Statistics, Utilities Policy

Teaching Experience

Courses

Introduction to Economics	ZHAW Winterthur (Bachelor Level, 6 ECTS)
Climate and Energy Economics	ZHAW Winterthur (Bachelor Level, 6 ECTS)
Environmental Economics	University Zurich (Master Level, 4 ECTS)
Environmental and Resource Economics	University Basel (Master Level, 6 ECTS, University Basel)
Quantitative Methods in Environmental and Energy Economics	ETH Zurich (Master Level, 4 ECTS, GAMS tutorial sessions)
Economics of Global Warming – Introduction to Environmental and Resource Economics	Dresden University of Technology (Master Level, 2 semester course, 2 x 6 ECTS)

Workshops and Seminars

October 2019	Computable General Equilibrium and Energy System Analysis PhD Level, Infrastructure research and policy training (Infratrain), Technical University of Berlin
August 2019	Analyzing Energy Policy Questions in a CGE framework PhD Level, 4NEMO ² Summer School: The bigger picture - beyond power markets, ifo Institute
December 2014	Numerical Methods in Environmental and Energy Economics PhD Level, Swiss Program in Environmental and Energy Economics, University Basel
October 2009	Stochastic Optimization Modeling: Principles and Application to Intermittent Renewables in the Energy Market PhD Level, Infrastructure research and policy training (Infratrain), Technical University Berlin, Teaching Assistant
April 2008	Introduction to the REMOVE model PhD Level, Dresden University of Technology
October 2007	Transport and Environment PhD Level, Infrastructure research and policy training (Infratrain), Technical University Berlin, Teaching Assistant
Autumn semester 2006	Environmental CGE Modeling using two Approaches - CCS and Transportation: An Application to Europe Master Level, Dresden University of Technology
October 2006	Introduction to Computable General Equilibrium Modeling PhD Level

Research Projects

01/2020 – 12/2021	Macro-modelling with micro-data for distributional and employment assessment
20/2018 – 12/2020	Influence of market structures and market regulation on the carbon market
01/2019 – 12/2019	Success factors in the European Emission Trading System
10/2015 – 10/2018	Modelling the Swiss Gas Market in a European Context
10/2014 – 12/2018	Future of Electricity Markets
01/2014 – 12/2020	Swiss Competence Center in Energy Research—Competence Center for Research in Energy, Society and Transition (SCCER-CREST)
05/2013 – 03/2014	Socio-Economic Effects of the Energy Market Integration of Switzerland in the EU
10/2011 – 09/2014	Evaluating Climate Policies in the Electricity Sector with a Hybrid Top-Down/Bottom-Up Model
10/2010 – 10/2011	Analyzing the Impacts of Renewable Electricity Generation on the German Electricity Market until 2030
01/2007 – 11/2009	Integrating the Transport Sector in an Efficient Energy and Climate Protection Strategy

List of Publications

Articles in Refereed Journals

- [18] Abrell, J., S. Rausch and C. Streitberger (2019): The Economics of Renewable Energy Support. **Journal of Public Economics**, 176, 94-117.
- [17] Abrell, J., S. Rausch and C. Streitberger (2019): Buffering Volatility: Storage Investments and Technology Specific Renewable Energy Support. **Energy Economics**, 84, 1-15.
- [16] Abrell, J., M. Kosch, and S. Rausch (2019): Carbon Abatement with Renewables: Evaluating Wind and Solar Subsidies in Germany and Spain. **Journal of Public Economics**, 169, 172-202.
- [15] Abrell, J., H. Yonezawa, and S. Rausch (2019): Higher Prices, Lower Cost? Minimum Prices in the EU Emission Trading Scheme. **The Scandinavian Journal of Economics**, 121, 446-481.
- [14] Abrell, J. P. Eser, J. Garrison, J. Savelsberg, H. Weigt (2019): Integrating economic and engineering models for future electricity market evaluation: a Swiss case study. **Energy Strategy Reviews**, 25, 86-106.
- [13] Abrell, J., S. Rausch, and G. Schwarz (2018): How Robust is the Uniform Emissions Pricing Rule to Social Equity Concerns? **Journal of Environmental Economics and Management**, 92, 783-814.

Articles in Refereed Journals (cont.)

- [12] Abrell, J. and S. Rausch (2017): Combining Price and Quantity Controls Under Partitioned Environmental Regulation. **Journal of Public Economics**, 145, 226-242.
- [11] Abrell, J. and H. Weigt (2016): The Short and Long Term Impact of Europe's Natural Gas Market on Electricity Markets until 2050. **The Energy Journal**, 37(SI3), 125-146.
- [10] Zaklan, A., J. Abrell und A. Neumann (2016): Stationarity Changes in Long-Run Energy Commodity Prices. **Energy Economics**, 59, 96-103.
- [9] Abrell, J. and S. Rausch (2016): Cross-Country Electricity Trade, Renewable Energy and European Transmission Infrastructure Policy. **Journal of Environmental Economics and Management**, 79, 87-113.
- [8] Pycroft, J., J. Abrell, and J.-C. Ciscar (2016): The Global Impacts of Extreme Sea-level Rise. A comprehensive economic assessment. **Environmental and Resource Economics**, 64, 225-253.
- [7] Pycroft, J., J. Abrell, and J.-C. Ciscar (2016): Response to "Comment on 'The Global Impacts of Extreme Sea-Level Rise: A Comprehensive Economic Assessment'". **Environmental and Resource Economics**, 64, 345-347.
- [6] Abrell, J., and H. Weigt (2016): Investments in a Combined Energy Network Model: Substitution between Natural Gas and Electricity? **The Energy Journal**, 37(4), 63-86.
- [5] Vrontis, Z., J. Abrell, F. Neuwahl, B. Saveyn, and F. Wagner (2016): Economic impacts of EU clean air policies assessed in a CGE framework. **Environmental Science and Policy**, 55(1), 54-64.
- [4] Abrell, J., and F. Kunz (2015): Integrating Intermittent Renewable Wind Generation - A Stochastic Multi-Market Electricity Model for the European Electricity Market. **Networks and Spatial Economics**, 15(1), 117-147.
- [3] Abrell, J. and H. Weigt (2012): Combining Energy Networks. **Networks and Spatial Economics**, 12, 377-401.
- [2] Abrell, J. (2010): Regulating CO₂ emissions of transportation in Europe: A CGE-analysis using market-based instruments. **Transportation Research Part D**, 15 (4), 235-239.

Books

- [1] Abrell, J. (2011): Transport under Emission Trading - A Computable General Equilibrium Analysis. Dissertation. Südwestdeutscher Verlag für Hochschulschriften.

Working Paper and Work in Progress

Abrell, J. and M. Kosch (2020): The impact of carbon prices on optimal renewable energy support. Resubmitted to Journal of the Association of Environmental and Resource Economics.

Abrell, J., M. Kosch, and S. Rausch (2020): How Effective Is Carbon Pricing? Emissions and Cost Impacts of the UK Carbon Tax. Under review.

Abrell, J., S. Rausch, and C. Streitberger (2020): The Value of Flexibility in Green Electricity Markets: Energy Storage, International Trade, and Tradable Quotas. Under review.

Abrell, J., J. Cludius, S. Lehmann, R. Betz, J. Schleich (2020): Active or Passive? Companies' use of the EU ETS. Under review.

Abrell, J. (2021): Database for the European Union Transaction Log. See corresponding website: www.euets.info.

Abrell, J. and M. Kosch: Cross-country Spillovers of Renewable Energy Promotion - The Case of Germany.

Schleich, J., S. Lehmann; J. Cludius, J. Abrell, R. Betz, J. Pinkse (2020): Active or passive? Companies' use of the EU ETS. Fraunhofer ISI Working Paper Sustainability and Innovation.

Abrell, J., L. Chavaz, and H. Weigt (2019): Measuring supply security – A compound indicator. WWZ Working Papers, University of Basel, 2019 (10); SCCER CREST Working Paper WP3-2019/3.

Abrell, J., L. Chavaz, and H. Weigt (2019): Infrastructure and policy - Dealing with supply disruptions on the European natural gas market. WWZ Working Papers, University of Basel, 2019 (11); SCCER CREST Working Paper WP3-2019/4.

Abrell, J. (2016): The Swiss Wholesale Electricity Market. SCCER CREST Working Paper WP3-2016/7.

Abrell, J., A. Ndoye Faye, and G. Zachmann (2011): Assessing the Impact of the EU ETS Using Firm Level Data. Bruegel Working Paper 2011/08.

Abrell, J., F. Kunz, and H. Weigt (2008): Start Me Up – Modeling of Power Plant Start-Up Conditions and their Impact on Prices. Dresden University of Technology Working Paper WP-EM-28.

Abrell, J. and H. Weigt (2008): The Interaction of Emission Trading and Renewable Energy Support. Dresden University of Technology Working Paper WP-EGW-05

Papers in non-refereed journals and policy reports

- Abrell, J., R. Betz, and M. Kosch (2020): The European Emissions Trading System and the German and Polish Electricity Market. Umweltbundesamt Climate Change 48/2020.
- Abrell, J., R. Betz, and M. Kosch (2020): The Californian Emissions Trading System and the Electricity Market. Umweltbundesamt Climate Change 49/2020.
- Abrell, J. and M. Kosch (2019): The drivers of carbon abatement with renewables. Quarterly Magazine of the European Association of Environmental and Resource Economists, Summer 2019.
- Abrell, J., W. Acworth, A. Boute, M. Kosch et al. (2019): Influence of Market Structure and Market Regulation on the Carbon Market. Interim Report, Umweltbundesamt.
- SCCER-CREST (2018): Zur schweizerischen Klimapolitik: Wie effizient ist die Bepreisung des fossilen Energieverbrauchs? SCCER CREST Whitepaper, Dezember 2018.
- SCCER-CREST (2018): Strommarktdesign: In welche Richtung soll es gehen? SCCER CREST Whitepaper, June 2018.
- Abrell, J., P. Fortenbacher, J. Savelsberg, J. Garrison, and C. Schaffner (2017): Bewertung zukünftiger Strommärkte: Bottom-up- und Top-down-Ansätze zur Modellierung zukünftiger Strommärkte. Bulletin Verein Schweizer Elektrizitätsunternehmen, 9/2017.
- SCCER-CREST (2017): Was kommt nach der kostendenkenden Einspeisevergütung (KEV): Fördern, Lenken, Abwarten? SCCER CREST Whitepaper, January 2017.
- European Commission (2013): The Clean Air Policy Package. Commission Staff Working Document. Impact Assessment (SWD (2013) 531).
- European Commission (2012): Review of Regulation (EC) No 842/2006 on certain fluorinated greenhouse gases. Commission Staff Working Document. Impact Assessment (COM (2012) 643 final, SWD (2012) 364).

Presentations

2020

Research seminar, Umea University, online, December 2020 (invited)
FSR Annual Climate, online, November 2020 (invited)
Research seminar Bank of Spain, online, October 2020 (invited)
“EU ETS and the Electricity Sector: Fuel Switching in Germany & Poland”, online, June 2020 (invited)

2019

Workshop on the Energy Transition, Paris School of Economics, December 2019 (invited).
Environmental Economics Seminar, Toulouse School of Economics, November 2019 (invited).
Economics Research Seminar, University of Luxemburg, October 2019 (invited).
Workshop on the Energy Transition towards Renewables, University of Hamburg, September 2019 (invited).
Conference of the European Association of Environmental and Resource Economists, Manchester, June 2019.
Mannheim Energy Conference, Mannheim, May 2019.
Research Seminar, Potsdam Institute for Climate Impact Research, Potsdam, June 2019 (invited)
Erdgastagung Universität St. Gallen, St. Gallen, March 2019 (invited)

2018

FSR Climate Annual Conference, Florence, November 2018.
Conference of the European Association of Environmental and Resource Economists, Gothenburg, June 2018.
Atlantic Workshop on Energy Economics, A Toxa, June 2018.
Research Seminar on Environment, Resource and Climate Economics, TU Berlin, May 2018 (invited).

2017 and before (selection)

FSR Climate Annual Conference, Florence, November 2017, October 2015.
Conference on “Future Electricity Markets between Liberalization and Regulation”, ZHAW, Winterthur, September 2017 (invited).
Conference of the European Association of Environmental and Resource Economists, Athens, June 2017.
Mannheim Energy Conference, Mannheim, May 2017, 2016.
Research Seminar, University of Bern, February 2017 (invited)
Research Seminar, Helmut-Schmidt-University, Hamburg, January 2017 (invited)
Workshop “New Modeling Approaches for the Electricity Sector”, Ifo-Institut, Munich, Nov. 2014 (invited)
Workshop “Marginal Abatement Cost Curves in the EU ETS”, EUI, Florence, May 2014 (invited).
SET-NAV workshop „Top-down/bottom-up hybrid modeling”, Trondheim, November 2016 (invited)
Symposium on “Electricity Markets with a High Share of Renewables”, Winterthur, May 2015 (invited).
Research seminar environment, resource, and climate economics, Berlin, December 2015 (invited)
Verein für Socialpolitik, Augsburg, September 2011, 2016
Conference of the European Assoc. of Environmental and Resource Econ., June 2009, 2011, 2015
Swiss Association for Energy Economics Conference, Lausanne, February 2016
Swiss Society of Economics and Statistics Annual Meeting, Basel, June 2015
Atlantic Workshop on Energy Economics, A Toxa, June 2016