Dr. Anna Broughel

555 Pennsylvania Ave, 558W Washington DC, 20001 abrough3@jhu.edu

EDUCATION

PhD, Economics, Policy, & Human Dimensions, SUNY-ESF and Syracuse University, 2010-2014. Fulbright Scholarship. MA, International Economic Relations, University of Konstanz, 2007-2009. DAAD Scholarship. BA, English and Economics, University of Tartu, 2003-2007, University of Helsinki (exchange), 2005-2006.

EXPERIENCE

School of Advanced International Studies at Johns Hopkins University, Lecturer, 2021-present.

Focus: teaching graduate classes in energy policy and economics at MASE, MAIR programs, capstone adviser. Clean Energy Leadership Institute, Director of Energy Leadership, 2021–2023.

Focus: directing and growing a clean energy training program for mid-career professionals; in charge of engagement of an alumni network with over 1,000 clean energy leaders in the U.S., organized educational and networking events in Chicago, Washington DC, New York, San Francisco, and virtually.

Estonian Business School, Director of International Summer School on Digitalization and Sustainability, 2020-2022.

Focus: remotely started the first international summer school in Estonia on the topics of digitalization and sustainability, involved high-profile speakers incl. Nobel laureate Bengt Holmström, grew summer school from 15 participants in 2021 to 40 participants in 2022, signed a partnership agreement with a Swiss university.

Estonian Business School, Nanodegree Lead, 2020-2022.

Focus: remotely launched and led a nanodegree (consisting of 5 courses) on *Data-Driven and Circular Business Transformations*, taught a graduate class on artificial intelligence applications in business.

Tetra Tech, Senior Economist and Statistician, 2019-2021.

Focus: advised U.S. Environmental Protection Agency on environmental issues pertaining to water quality in the U.S., worked on energy efficiency saving estimations for the Texas utilities, advised EBRD on the creation of voluntary carbon markets in Kazakhstan, grant-writing and client acquisition experience.

University of Maryland, College Park, Lecturer in Energy Policy and Economics, 2017-2021.

Focus: researched permitting barriers to building offshore wind power in the U.S, taught graduate classes in energy policy, energy economics, and climate change.

U.S. Department of Energy, Solar Energy Technologies Office, ORISE Fellow, 2018-2019.

Focus: evaluated incoming grant proposals for R&D in solar energy, co-managed a 10-million grant portfolio with research projects, drafted calls for R&D grant proposals.

University of St. Gallen, Post-doctoral researcher, 2014–2017.

Focus: developed an institutional partnership between University of Tartu, University of Sumy (Ukraine), and St. Gallen University to transfer knowledge on sustainability and update infrastructure, secured funding.

State University of New York (SUNY-ESF), Graduate research and teaching assistant, 2011-2014.

Focus: evaluation of bioenergy policies in the U.S., willingness to pay for solar home systems in rural Mexico. International Solar Center Konstanz, Project assistant, 2009-2010.

Focus: grant-writing, support of solar development projects in Cameroon, Tanzania and India.

AWARDS, RECOGNITION, AND FELLOWSHIPS

•	Forbes Energy contributor	2022-present
•	Executive Council, U.S. Association for Energy Economics	2020-present
•	Non-resident Fellow, University of Texas at Austin	2020-present
•	ORISE Science and Technology Fellow	2018-2019
•	Clean Energy Leadership Institute, Fellow	2018
•	Public Policy Fellow, The Fund for American Studies	2018
•	Best Poster Award, International Association of Energy Economics	2017
•	Award in oikos business case writing competition	2017
•	Alumni Award, SUNY-ESF	2014
•	Fulbright Award, Fulbright Association	2010-2014
•	Full tuition fee waiver for doctoral study, SUNY-ESF	2010-2014
•	International Student Leader Award, Syracuse Center of Excellence	2013
•	Institute for Humane Studies, dissertation award	2013, 2014
•	Raymond von Dran Idea Award, Syracuse University	2013
•	Farnsworth Award, SUNY-ESF	2013
•	Rosen family fund award for field research in Mexico, SUNY-ESF	2013
•	Environmental Entrepreneurship Institute, PERC	2011
•	DAAD award for master's study in Germany	2009-2011

RESEARCH

Peer-reviewed journal articles:

- Cranmer, A., Broughel, A., Ericson J. D., (2023). "Getting to 30 GW by 2030: Visual preferences of coastal residents for offshore wind farms on the US East Coast". *Energy Policy*, 173, 113366.
- Cranmer, A., Ericson J. D., Broughel, A. Dharni, K. (2022). "Immersion matters: The Medium is the Message for Wind Energy". *Journal of Cleaner Production*, 378, 134498.
- Vuichard, P, Broughel, A., Tabi, A., Wustenhagen, R. (2022). "Keep it Local and Bird-Friendly: Social Acceptance of Wind Energy in Switzerland, Estonia and Ukraine A Cross-Country Analysis based on Choice Experiments". *Energy Research & Social Science*, 88, 102508.
- Cranmer, A., Ericson, J., Broughel, AE, and Bernard, B. (2020). "Worth a thousand words: Presenting wind turbines in virtual reality reveals new opportunities for social acceptance and visualization research". *Energy Research & Social Science*, 67, 101507.
- Mignon, I., and Broughel, AE. (2020). "What interests do intermediaries prioritize during wind- and solar project development?" *Environmental Innovation and Societal Transitions*, 36, 393-405.
- Broughel, AE. (2019). "On the ground in sunny Mexico: A case study of consumer perceptions and willingness to pay for solar-powered devices". World Development Perspectives, 15, 100-130.
- Broughel, AE. (2018). "Impact of state policies on generating capacity for production of electricity and combined heat and power from forest biomass in the United States". *Renewable Energy*, 134, 1163-1172.
- Ebers Broughel, A., Hampl, N. (2018). "Community financing of renewable energy projects in Austria and Switzerland: profiles of potential investors". *Energy Policy*, 123, 722-736.
- Ebers, A., Malmsheimer, R., Volk, T., Newman, D.H., (2016). "Inventory and classification of federal and state forest biomass electricity and heat policies in the US". *Biomass and Bioenergy*, 84, 67-75.

Book chapters:

Evli, S., Broughel, A., Ansari, D. (2022). "Evaluation of net-zero carbon and 100% renewable energy scenarios for 2050 and beyond". In Wood, G., et. Al. (eds): The Palgrave Handbook on Zero Carbon Energy Systems and Energy Transitions. Palgrave McMillan, 1-25.

- Broughel, A., Wüstenhagen, R. (2022). "The Influence of Policy Risk on Swiss Wind Power Investment"; in: Hettich, P., Kachi, A.: Swiss Energy Governance: Political, Economic and Legal Challenges and Opportunities in the Energy Transition, Springer Nature, 345-368.
- Ebers, A. Stauch, A., Schmid, B., Vuichard, P. (2018). "Consumer co-ownership in renewables in Switzerland". In Lowitzsch, J. (ed). Energy Transition: Financing Consumer Co-Ownership in Renewables. Palgrave McMillan, 451-476.
- Ebers, A. and Hampl, N. L. (2016). "Community Financing of Renewable Energy Projects in the Age of Low and Negative Interest Rates in Austria and Switzerland". In Taisch, F., Jungmeister, A., and Gernet, H. (eds.): Cooperative Identity and Growth. St.Gallen: Verlag Raiffeisen Schweiz, 2016, 343-353.
- Ebers, A., Newman, D., (2014). "Economics of conservation easements", in: Kant S. and Janaki, A., (eds.) Handbook of forest economics, Routledge, London, 430-443.

Reports:

- Berg, et al. (2022). Report on the Future Relations between Estonia and Asia [original in Estonian: "Eesti ja Aasia tulevikusuhete raport"]. University of Tartu. Commissioned by the Estonian Foreign Ministry. Published online: https://digiriiul.sisekaitse.ee/bitstream/handle/123456789/2947/Eesti-ja-Aasia-tulevikusuhete-raport.pdf?sequence=1&isAllowed=y
- Sinha, A., Rath, J., Broughel, A., Roy, S. (2021). "Extreme Events and the Electric Power Industry: Using Data Analytics for Improved Understanding". EPRI internal report.
- Tetra Tech (2021). Effluent Temperature Reduction Technologies for Wastewater Treatment Facilities. Internal report for US EPA. Authored sections on environmental costs and benefits.
- Ebers Broughel, A., and Viiding, M. (2021). "Estonian Experience with Electric Mobility: Is There a First-Mover Advantage with EVs?" IAEE Energy Forum, First Quarter 2021, pp. 22-25. Published online: https://www.iaee.org/en/publications/newsletterdl.aspx?id=937
- Stauch, A., Ebers Broughel, A., Schmid, B., Vuichard, P., (2020). "Community Finance: Renewable Energy Cooperatives", in "Financing the Low-Carbon Economy: Instruments, Barriers and Recommendations", Swiss Sustainable Finance. November 2020, 64-67. Published online:
 - https://www.sustainablefinance.ch/upload/cms/user/2020 11 19 Financing the Low Carbon Economy EN ful I report final.pdf
- Ebers Broughel, A. (2020). "Setting the Bar for 2035: Energy Foresight Scenarios for Estonia". Report for the Foresight Centre, Parliament of Estonia. Published online: https://www.riigikogu.ee/wpcms/wp-content/uploads/2020/02/2020_Globaalsed_joujooned-Energy_Futures_Estonia.pdf
- Klotz, L., et al. (2019). "Twenty questions about design behavior for sustainability". Report of the international expert panel on behavioral science for design, *Nature Sustainability*. Published online at: https://www.nature.com/documents/design_behavior_for_sustainability.pdf.
- Feldman, D., Ebers, A., Margolis, R. (2019). "Q3/Q4 2018 Solar Industry Update". National Renewable Energy Laboratory report, NREL/PR-6A20-73234. January 2019. Published online at: https://www.nrel.gov/docs/fy19osti/73234.pdf
- Wüstenhagen, R., Blondiau, Y., Ebers, A., Salm, S. (2017). "Lowering the financing cost of Swiss renewable energy infrastructure: reducing the policy risk premium and attracting new investor types". Project SI/501293-01. Swiss Federal Office of Energy. Berne/St.Gallen. Published online at: https://www.aramis.admin.ch/Default.aspx?DocumentID=45844&Load=true

Ebers, A., Wüstenhagen, R., (2016). "6th consumer barometer of renewable energy". Report. University of St. Gallen. Published online at: https://www.alexandria.unisg.ch/249529/1/Kundenbarometer_E_WEB.pdf.

Ebers, A., Wüstenhagen, R., (2015). "5th consumer barometer of renewable energy". Report. University of St. Gallen. Published online at: https://www.alexandria.unisg.ch/249530/1/Kundenbarometer2015 E WEB.pdf.

Teaching materials:

- Ebers, A. 2017. Wind in the sails: managing social acceptance of large wind energy projects in Switzerland. oikos international case study. St.Gallen.
- Ebers, A., Joller, L., Kostyuchenko, N., Smolennikov, D. 2017. Innovative green teaching: a primer on innovative teaching techniques of environmental and energy topics. University of St.Gallen

Op-eds and expert interviews:

- Kivi, K. (2022). Politicians and Experts Explain: Did the Electricity Markets Fail and What Should be Changed? [In Estonian: Poliitikud ja eksperdid selgitavad: kas elektribörs on läbi kukkunud ja mida tuleks muuta)]. Postimees (largest Estonian daily newspaper). Online. August 2022.
- Ebers Broughel. A., Ansari, D. (2021). "Texas' Freeze, Energy Foresight, and Preparedness." OurEnergyPolicy.org. 3.03.2021. https://www.ourenergypolicy.org/texas-freeze-energy-foresight-and-preparedness/
- Ebers Broughel, A. (2021). 'Turning around Estonia's oil shale region: first attract business, employment will follow.' CEENERGYNEWS. 2.24.2021
- Ansari, D., Ebers Broughel, A. (2021). 'Planning our energy future: Why unforeseeable events should be foreseen.' CEENERGYNEWS. 2.11.2021.
- Ebers Broughel, Betanabhatla, V., Flores, A., et al. (2020). "A Hopeful Vision for the Future of Energy". <u>Energy Institute</u>, The University of Texas at Austin. 12.23.2020
- Ebers Broughel, A. (2020). "Let's Make Eastern Estonia the first Opportunity Zone in Europe". Teeme Ida-Virumaast Euroopa esimese "Võimaluste piirkonna" [In Estonian]. <u>Foresight Centre</u> at the Parliament of Estonia. 12.14.2020

Select conference proceedings:

- The Way Forward for More Inclusive Energy Scenarios, with Stevens, KA, Chan G, Michaud, G. 2021 APPAM Fall Research Conference.
- Using Quantitative Methods to Examine the Impacts of policies for Clean Energy Technology Adoption, with Wang, Y., Wilson, E., Graff, M. 2020 APPAM Fall Research Conference.
- How to Awakes a Sleeping Giant? Public Acceptance of Energy Projects with Qiu, YL. 2020 APPAM Fall Research Conference.
- Unique Solutions for Renewable Energy, Marine Energy Storage, and Water Usage, with Mattson, G., Johansson, B. 2020 AAAS Annual Meeting.
- Funding and Collaboration Opportunities for Energy Researchers, 2019 37th USAEE/IAEE North American Conference.

RESEARCH PROJECTS

- Financing Decarbonization: A Choice-Based Conjoint Assessment of Energy Efficiency Loan Program Preferences in Three Southern States (2021-present). Research project with Johns Hopkins and Loyola University collaborators.
- Mapping Asia-Estonian Relationships through Long-Term Scenario Planning, Estonian Foreign Ministry (2021-2022). Energy team lead for the scenario planning research project that advises on the best strategies for Estonia in Asia.
- **Novel Visualization Techniques for Offshore Wind Energy Projects,** with Bentley University (2017–2022). Online and inperson experiments with 360 videos and virtual reality.

Statewide Evaluation of Energy Efficiency Portfolios, Public Utility Commission of Texas, Tetra Tech (2021). Research design of a statewide evaluation of Texas energy efficiency programs across nine investor-owned utilities.

- **Decommissioning of Solar Energy Projects in New York State,** NYSERDA, Tetra Tech (2021). Conducted cash flow analysis for a decommissioning bond for a 5 MW solar project in NY.
- Carbon Offset Opportunities in Kazakhstan, European Bank for Reconstruction and Development, Tetra Tech (2021).

 Interviewed leading experts in carbon offsets, researched international carbon offsets, drafted a report for EBRD.
- **Extreme Events and the Electric Power Industry: Using Data Analytics.** EPRI, Tetra Tech (2020). Co-authored a report on extreme weather events and their impacts on the electric power industry.
- **Delta.Analytics Team, Tetra Tech's Tech1000 initiative** (2020). Nominated to be one of eight team members for a company-wide (out of ca. 20,000 employees) initiative for advanced analytics.
- Solar Energy Evolution and Diffusion Studies (SEEDs2), U.S. Department of Energy (2018–2019). Science and Technology Fellow. Co-managed a 10-million dollar research portfolio SEEDs2 focusing on data-driven and evidence-based methods to address barriers to solar technology adoption.
- **Solar Industry Update**, U.S. Department of Energy (2018–2019). Contributed to several quarterly Solar Industry Update reports working together with the research staff at the National Renewable Energy Lab (NREL).
- White Paper on Equity and Access, U.S. Department of Energy (2019). Lead author on the U.S. DOE internal white paper on energy access and environmental justice.
- **Expert Panel "Design Behavior for Sustainability",** Columbia University (2019). Report co-author for Nature Sustainability on 'Behavioral science for design'.
- Strategies and Risks of Third-Party Development of Wind Power and Solar PV projects in Sweden, UMD (2017–2018). Co-PI. Using surveys, discrete choice experiments, analyzed strategies of wind and solar energy developers in Sweden.
- Delays in Permitting of Offshore Wind Energy Projects in the U.S, UMD (2017–2018). Analyzed state and federal permitting of offshore wind farms, evaluating different risk factors for project developers.
- International Opinion Surveys in Energy, University of St. Gallen, St. Gallen, CH (2014–2017). Principal Investigator. Designed and evaluated large-scale international surveys investigating the respondents' attitudes towards energy issues in Switzerland, Austria, Ukraine, and Estonia.
- Improving energy security through Swiss-Ukrainian-Estonian institutional partnership, St.Gallen, CH (2015-2017). Co-PI. Evaluated social acceptance of wind energy in EE, UA, and CH, organized two research colloquia for students, helped develop 'green' curriculum at partner institutions, organized webinars on publishing in international peerreviewed journals and outcome-based education, co-authored a primer on Innovative Teaching of Environmental and Energy Topics, assisted in setting up the 'Idea Labs for Entrepreneurship' at partner institutions.
- Willingness to Pay for Solar-Powered Household Devices in Rural Mexico, Sierra Gorda, MX (2013). Pl. Field study in off-grid locations, evaluation on perceptions of solar power, willingness-to-pay, and budget constraints.
- Impact of State Policies on Generating Capacity for Production of Electricity and Combined Heat and Power from Forest Biomass in the United States, Research Foundation of State University of New York, Syracuse, NY (2011–2013). Graduate research assistant. Compiled a database with nearly 500 state policies, classified and evaluated forest biomass energy policies across the U.S., identifying policies with the largest impact on installed bioenergy capacity.

EDITORIAL BOARDS AND PEER REVIEWER

Editorial Board Member:

Guest Editor, Special Issue on Energy Justice in the Context of the Energy Transition, Progress in Energy, 2022-present. Associate Editor, Frontiers in Sustainable Energy Policy, 2023-present.

Senior editor for the Center for Growth and Opportunity, Utah State University, 2023-present.

Associate Editor, Journal of Economic Asymmetries, 2022-present.

Peer Reviewer for Journals:

Electricity Journal, Research Policy, Energy Policy, Renewable Energy, Energy Research & Social Science, International Journal of Energy Sector, International Journal of Climate Change Strategies and Management, Current Opinion in Environmental Sustainability, Swiss Journal of Business Research and Practice, Zeitschrift für betriebswirtschaftliche Forschung (zfbf).

Abstract Reviewer and External reviewer:

USAEE and IAEE conferences.

Peer reviewer for U.S. DOE (details covered under an NDA).

Chapter on 'Public policy instruments to support sustainable wood energy', UNECE.

Academic jury member:

St.Gallen Wing of Excellence Award 2017; USAEE Young Professional Best Research Paper Award 2020 and 2021.

RECENT SPEAKING ENGAGEMENTS

Presenter to Climatebase, Science and Research track, May 2023.

Presenter. "US-EU Foreign Relations at the Time of Energy Transitions". Estonian Council on Foreign Relations webinar, April 2023.

Presenter, "Promoting Net Zero and Carbon Neutral Commitments: A Workshop to Guide Policies and Actions in the Asia-Pacific Region", APEC-USAID joint workshop, Honolulu, Hawaii, April, 2023.

Presenter, chair, "How solid are energy futures? A systematic assessment of 60 prominent outlooks." Hydrogen and Geopolitics in Energy Scenarios Workshop. Stiftung Wissenschaft und Politik. Berlin, Germany. January, 2023.

Presiding speaker, "Inflation Reduction Act: Scaling Climate Investment for a Decarbonized Future". U.S. Association for Energy Economics Annual Conference. Houston, TX. November 2022.

Presenter, "How does Digitalization Transform the Energy Sector?". IAEE Webinar, November 2022.

Presenter, "Wind Power". U.S. Association for Energy Economics Annual Conference. Houston, TX. November 2022.

Presenter, "What to Know about How the War in Ukraine Has Impacted Alternative Energy Trends and Strategies". JNK Securities webinar series, August 2022.

Presenter and moderator at the first and second International Summer School for Digitalization and Sustainability, Estonian Business School, August 2021 & 2022.

Presenter at Sloan Electricity Markets Primer for Economists and Social Scientists. Colorado School of Mines. October 2021 & August 2022.

Host of "Academics on FIRE", with Johannes Urpelainen. Online. February 2022.

Presiding speaker, "Promised Technology Solutions: Where are They?", U.S. Association for Energy Economics Annual Conference. Online. November, 2021.

Presenter, "What clean tech will get us to net zero? An overview based on long-term energy scenarios", UT Austin. November, 2021.

Presenter, "How Will Artificial Intelligence (AI) and Cleantech Help Us Reach Net Zero Emissions? Insights from Long-Term Energy Scenarios. Johns Hopkins University, August 2021.

Presenter to the Houston chapter of the U.S. Association for Energy Economics, *Technology megatrends in long-term* energy scenarios. July 2021.

Presenter to the Clean Energy Leadership Institute, National and DC cohorts, *Technology Megatrends – What Will Get us to Net Zero?* June 2021.

Host at the IAEE webinar on Energy Transitions in India. Online. June 2021.

Panelist at Southern Methodist University's Roundtable on Sustainable Energy. Online. March 2021.

Host at the IAEE webinar on Decarbonization in the United States: Implications for Indian Country, Online. March 2021.

Panelist at the Fletcher Political Risk Conference, <u>Tackling Climate Change Risk in the Long Term</u>, Online. February 2021.

PODCASTS

<u>A Rock and A Hard Place</u>: Mineral Security Education and Energy Communication with Anna Broughel, Colorado School of Mines podcast. March 2023.

IB Green Minds: In Conversation with Anna Broughel, Imperial College's Business podcast, December 2022.

Energy Predictions are Hard. Earthlings podcast, December 2021.

Does a Green Transformation Really Bring us a Better Future, Estonian Business School podcast, April 2021.

Social Acceptance of Wind Energy: Evidence from Cross-Country Surveys, IAEE podcast, September 2020.

Long-term Scenario Planning for Better Decisions, USAEE podcast, August 2020.

PAST TALKS AND CONFERENCE PRESENTATIONS

Chair at BECC session <u>Cities on the Frontiers of Sustainability</u>, December 2020.

Presenter at IAEE webinar on Energy Sector Recruiting and Career Advice, November 2020.

Host at IAEE webinar on Insights from Long-Term Energy Scenarios, November 2020.

Organizer, panelist and discussant at three sessions at APPAM 2020 <u>Using Quantitative Methods to Examine The Impacts of Policies</u>, <u>Public Acceptance of Energy Projects</u>, <u>Energy Foresight and Infrastructure</u>, November 2020.

Judge at USAEE Young Professional Best Paper Award Competition, October 2020.

Presenter at a televised conference <u>A Different Future</u> [in Estonian], Foresight Centre at the Parliament of Estonia, September 2020.

Host at USAEE webinar series on <u>Al in energy</u>, <u>From Pipedream to Practical Applications</u>, <u>Theory and Practice</u>, <u>Advancing New Research Paradigms</u>, June - August 2020.

Host at USAEE webinar Solar Energy in the Post-Covid19 World: Moving to a New Normal, June 2020.

Presenter at the MISTRAL symposium on Public Acceptance of Wind Energy, May 2020.

Presenter at two webinars on Energy Futures, Foresight Centre at the Parliament of Estonia, May 2020.

Presenter at the 1st World CleanTech Week eConvention on North American Energy Markets, April 2020.

Discussant at AAAS annual meeting, session <u>Unique Solutions for Renewable Energy, Marine Energy Storage, and Water Usage</u>. Seattle, February 2020.

Chair at the BECC session Scalable solution for SMBs. Sacramento, November 2019.

Chair at the USAEE session Funding and Collaboration Opportunities for Energy Researchers, Denver, November 2019.

Round-table speaker and discussant at two sessions at APPAM: <u>Energy Access, Energy Justice, and Research-Practice-Policy Connections</u>; <u>Energy & Low-Income Communities</u>. Denver, November 2019.

Presenter at The Institute of World Politics. *Improving Energy Security in Ukraine and Estonia*. Women Executives in National Security Program lecture series. Washington, DC, March 2018.

Guest lecturer for 'Energy Economics' course PLCY 798, University of Maryland, College Park, Ben Schlensinger. MD, November 2017.

Guest lecturer for 'Intersection of Technology and Policy in Modernizing the Energy Systems' course Phys622/PLCY699B. Ellen Williams. University of Maryland, College Park, November 2017.

Presenter at Center for Global Sustainability/School of Public Policy Research Seminar. Like father like son, but not mother like daughter: differences in perceptions of renewable energy in Swiss adults and teenagers. College Park, MD. November 2017.

Presenter at Behavior, Energy & Climate Change (BECC) Conference. How do Swiss renters and homeowners value green building features? Sacramento, CA. November 2017.

- Presenter at Swiss Competence Center for Energy Research annual conference. Energy governance: Enabling policies from investor & stakeholder perspectives. St. Gallen, CH. September 2017.
- Presenter at International Association of Energy Economics. Local acceptance of wind energy in Switzerland, Estonia, and Ukraine: a cross-country analysis based on choice experiments. Vienna, AT. September 2017
- Presenter at 10th International workshop on empirical methods in energy economics, Local acceptance of wind energy in Switzerland, Estonia, and Ukraine: a cross-country analysis based on choice experiments. University of Southern California, Los Angeles. CA, 06.2017.
- Presenter at International Conference for Research and Development. On the ground in sunny Mexico: A case study of a rural electrification policy and willingness to pay for solar-powered devices. University of Bern, Bern, CH. 09.2017.
- Presenter at Joint Global Change Research Institute. Wind in the sails: reducing policy and regulatory risks of wind project development in SwitzerlandCollege Park, MD. 07.2017.
- Presenter at 8th St. Gallen Forum for Management of Renewable Energies. Wind in the sails: reducing the soft cost of wind project development. University of St. Gallen, St. Gallen, CH. 05.2017.
- Presenter at XVIII International conference on cooperative studies (IGT/ICCS). Community financing of renewable energy projects in the age of low and negative interest rates in Austria and Switzerland. University of Luzern, Luzern, CH. September 2016.
- Closing panelist for the course 'Energy systems in transition: present and future technologies & policies', European Campus of Excellence. Zürich, CH. 07.2015.
- Presenter at 7th St. Gallen Forum for Management of Renewable Energies. 6th consumer barometer of renewable energy. University of St. Gallen, St. Gallen, CH. 05.2016.
- Presenter at Research colloquium 'Renewable energy, sustainability, environment and innovations research'. Giving wind the green light: permitting, inspection, and interconnection of large renewable energy projects in Switzerland. Tartu, EE. 11.2015.
- Presenter at Center for Energy Policy and Economy. Giving wind the green light: permitting, inspection, and interconnection of large renewable energy projects in Switzerland. ETH Zürich, Zürich, CH. 11.2015.
- Presenter at oikos energy academy. Giving wind the green light: permitting, inspection, and interconnection of large renewable energy projects in Switzerland. Tel Aviv University, Tel Aviv, IL. 06.2015.
- Presenter at ENERGENO-Symposium. Energy cooperatives as an alternative investment in the age of negative interest rates. Humboldt University, Berlin, DE, 06.2015.
- Presenter at Zurich University of Applied Sciences. Renewable energy policy in the US. Symposium on Electricity markets with a high share of renewables: experiences and future challenges. Winterthur, CH. 05.2015.
- Presenter at 6th St. Gallen Forum for Management of Renewable Energies. 5th consumer barometer of renewable energy. University of St. Gallen, St. Gallen, CH. 05.2015.
- Panelist for Women in research, University of St. Gallen, St. Gallen, CH. 05.2016.
- Presenter at oikos sustainability thesis workshop. How to craft a Master's thesis? St. Gallen, CH. 11.2014.
- Presenter at 37th International Association for Energy Economics (IAEE) conference. Policy interactions and effectiveness in forest bioenergy sector in the U.S. New York, NY. 06.2014.
- Presenter at oikos energy academy. Bioenergy Policy Effectiveness in the United States. St. Gallen, CH, 04.2014.
- Presenter at Society of American Foresters Annual Convention. Inventory of national forest bioenergy policies. Charleston, SC. 03.2014.
- Presenter at Towson University. Economics of Conservation Easements. Towson, MD, 2013.
- Conference proceedings at EU-PVSEC 28. Klaus, T., Sarkadi, M., Reddemann, S., Ngwe Mbeleg, P., Ebers, A., Kopecek, R., Peter, K. Lessons learned: off-grid village electrification in the rainforest of rural Cameroon. Paris, FR.

POSTERS

Local acceptance of wind energy in Switzerland, Estonia, and Ukraine: a cross-country analysis based on choice experiments. Best poster award. International Association of Energy Economics, Vienna, AT. 09.2017.

Investor acceptance, investor diversity and price of policy risk. Swiss Competence Center for Energy Research, annual conference, Winterthur, CH, 09.2016

Lower financing cost of renewable energy: Reducing policy risk premium & keeping RE investments home. Swiss Competence Center for Energy Research conference, St. Gallen, CH, 09.2015

Solar solutions to electrify Mexico, Syracuse Center of Excellence in Environmental and Energy Systems, Syracuse, NY. 07.2012

Metrotram: sustainable transportation for Volgograd, Blekinge Institute of Technology, Karlskrona, SE, 08.2011

LEADERSHIP AND OTHER TRAINING

Adaptive Leadership Training. Adaptive Change Advisers, virtual, fall, 2022.

Orange Dialogue for Peace, series of five workshops promoting intercultural dialogue, Syracuse University, Syracuse, NY, 2012-2013

Oikos Leadership Academy. Belfast, IE, fall 2010.

American Institute for Political and Economic Systems. The Fund for American Studies. Prague. CZ, summer 2007

TEACHING EXPERIENCE

- Energy Economics, graduate course at SAIS JHU, Washington, DC (spring; fall 2021; summer, fall, 2022).
- Curriculum Development and Fellowship Implementation, Clean Energy Leadership Institute (2021-present).
 Supervised 6 fellowship cohorts across four U.S. time zones. Graduated 230 fellows in November 2022.
 Responsible for the curriculum and the overall fellowship experience. Organized hybrid emPOWER22 conference in Chicago and online with over 200 participants, focusing on empowering diverse voices in cleantech.
- Artificial Intelligence in Business Applications, graduate course at Estonian Business School (fall 2021, 2022).
- International Summer School on Digitalization and Sustainability, Estonian Business School (2020-present). Founder and academic director of the international summer school in digitalization and sustainability, Tallinn (Estonia) and Helsinki (Finland), August 2021, 2022.
- Economics Basics, graduate course at SAIS JHU, Washington, DC (summer, 2022).
- Energy Policy and Energy Economics, graduate courses at the School of Public Policy, University of Maryland,
 College Park, MD (spring, 2018 spring, 2021).
- Climate Practice and Policy, undergraduate course at the School of Law, UMD College Park, MD (fall 2018)
- Energy systems in transition: economic, policy and social challenges, visiting instructor, University of St. Gallen and European Campus of Excellence, St. Gallen/Zurich, CH, summer, 2016.
- Sustainable economic systems, visiting instructor, Lucerne University of Applied Sciences and Arts, Lucerne, CH, summer, 2015.
- Principles of Accounting, Graduate teaching assistant, SUNY-ESF, Syracuse, NY, fall, 2012-spring, 2014.
- Graduate Colloquium on Teaching and Learning, teaching fellow, State University of New York, Syracuse, NY, summer, 2012; summer, 2013.
- Going Green, instructor, University of Konstanz, Konstanz, DE, summer, 2010.

MENTORING ACTIVITIES

Doctoral Dissertation Reviewer & Examiner:

Olga Shuvalova, Lomonosov State University, Moscow, Russia; Jiehong Lou, UMD College Park

Master Capstone Projects:

Trexler, D. 2021. Financing Decarbonization: A Choice-Based Conjoint Assessment of Energy Efficiency Loan Program Preferences in Three Southern States.

Master Theses:

Dällenbach, N. 2016. Classifying policy risk of renewable energy investments - the case of large wind projects in Switzerland.

Sturm, L. 2016. Using real options to quantify policy risk premia for large wind energy projects in Switzerland.

Cetin, K. 2016. Mapping administrative processes of large renewable energy projects: A comparative analysis of wind energy installations in Germany and Switzerland.

Stanescu, H. 2016. Headwinds for wind power in Romania: case study of a green certificate policy shift and its effect on wind power investments.

FUNDING

European Commission. Catering grant for International Summer School in Digitalization and Sustainability. 2021-2022. U.S. Embassy in Tallinn. \$10,000 for International Summer School in Digitalization and Sustainability. 2021-2022. Bentley University research fund. ca. \$15,000 for research assistants and experiments. 2017-2021.

Swiss National Science Foundation: Improving energy security through Swiss-Ukrainian-Estonian institutional partnership. \$194,923. 2015-2017. Project website: http://p3.snf.ch/project-160564.

Swiss Federal Office of Energy: Lowering the financing cost of Swiss renewable energy infrastructure, ca. \$200,000. 2015-2017.

Raiffeisen bank Switzerland: Consumer barometer of renewable energies. \$40,000. 2015-2016.

Environmental justice, service project at the STEP Center at Syracuse University. ca. \$17,000. 2011-2014.

Model United National debating club, president, University of Konstanz, Germany ca. \$20.000. 2007-2009.

oikos Konstanz chapter co-founder, NGO of students for sustainable economics and management, co-organizer of the first Day of the Environment of campus, University of Konstanz. DE. 2009-2010.

LANGUAGES

English, Estonian, German, Russian – working proficiency French, Finnish, Spanish – intermediate reading proficiency