

Gabriel Chan

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ACADEMIC APPOINTMENTS

University of Minnesota–Twin Cities

2021 – present	Associate Professor (with tenure), Humphrey School of Public Affairs (primary affiliation)
2018 – present	Affiliate Faculty, University of Minnesota Law School
2015 – 2021	Assistant Professor, Humphrey School of Public Affairs

PROFESSIONAL AFFILIATIONS AND ACADEMIC ADMINISTRATIVE APPOINTMENTS

Institute on the Environment, University of Minnesota

2016 – present	Faculty Associate
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Humphrey School of Public Affairs, University of Minnesota

2021 – present	Charles M. Denny Jr. Chair in Science, Technology, and Environmental Policy (jointly held)
2021 – present	Co-Director, Center for Science, Technology, and Environmental Policy
2017 – present	Director of Graduate Study, Science, Technology, and Environmental Policy Area
2019 – present	Area Co-Chair, Science, Technology, and Environmental Policy Area

EDUCATION

2015	Ph.D. Public Policy, Dissertation: <i>Essays on Energy Technology Innovation Policy</i> Harvard University
2009	B.S. Earth, Atmospheric, and Planetary Science B.S. Political Science Massachusetts Institute of Technology

JOURNAL ARTICLES (UNDERLINE INDICATES STUDENT, STAFF, OR POST-DOC)

- [1] Klass, Alexandra, **Gabriel Chan**. 2021. “Cooperative Clean Energy.” *North Carolina Law Review* 100.
- [2] Sun, Bixuan, Sergey Kolesnikov, Anna Goldstein, **Gabriel Chan**. 2020. “A Dynamic Approach for Identifying Technological Breakthroughs with an Application in Solar Photovoltaics.” *Technological Forecasting & Social Change* 165: 120534.
- [3] Matisoff, Daniel, Ross Beppler, **Gabriel Chan**, Sanya Carley. 2020. “A Review of Barriers in Implementing Dynamic Electricity Pricing to Achieve Cost-Causality.” *Environmental Research Letters* 15: 093006.
- [4] Lenhart, Stephanie, **Gabriel Chan**, Lindsey Forsberg, Matthew Grimley, Elizabeth Wilson. 2020. “Municipal Utilities and Electric Cooperatives in the United States: Interpretive Frames, Strategic Actions, and Place-Specific Transitions.” *Environmental Innovation and Societal Transitions* 36: 17-33.
- [5] Zhang, Huiming, Kai Wu, Yueming Qiu, **Gabriel Chan**, Shouyang Wang, Dequn Zhou, and Xianqiang Ren. 2020. “Solar Photovoltaic Interventions Have Reduced Rural Poverty in China.” *Nature Communications* 11: 1969.
- [6] **Chan, Gabriel**, Robert Stavins, and Zou Ji. “International Climate Change Policy.” 2018. *Annual Review of Resource Economics* 10(2018): 335-360.
- [7] Huenteler, Joern, Tian Tang, **Gabriel Chan**, and Laura Diaz Anadon. 2018. “Why Is China’s Wind Power Generation Not Living up to Its Potential?” *Environmental Research Letters* 13(4).
- [8] **Chan, Gabriel**, Anna P. Goldstein, Amitai Bin-Nun, Laura Diaz Anadon, and Venkatesh Narayanamurti. 2017. “Six principles for energy innovation.” *Nature* 552(7683): 25-27.

- [9] **Chan, Gabriel**, Isaac Evans, Matthew Grimley, Ben Ihde, and Poulomi Mazumder. 2017. "Design Choices and Equity Implications of Community Shared Solar." *The Electricity Journal* 30(9): 37-41.
- [10] Anadon, Laura Diaz, **Gabriel Chan**, Amitai Y. Bin-Nun, and Venkatesh Narayanamurti. 2016. "The Pressing Energy Innovation Challenge of the U.S. National Labs." *Nature Energy* 1: 16117.
- [11] Anadon, Laura Diaz*, **Gabriel Chan***, Alicia Harley*, Kira Matus, Suerie Moon, Sharmila Murthy, and William Clark (* indicates co-first-authorship). 2016. "Making Technological Innovation Work for Sustainable Development." *Proceedings of the National Academies of Science* 113(35): 9682-9690.
- [12] **Chan, Gabriel**, Carlo Carraro, Ottmar Edenhoffer, Charles Kolstad, and Robert Stavins. 2016. "Reforming the Intergovernmental Panel on Climate Change's Assessment of Climate Economics." *Climate Change Economics* 7(1).
- [13] Shrimali, Gireesh, **Gabriel Chan**, Steffen Jenner, Felix Groba, and Joe Indvik. 2015. "Evaluating Renewable Portfolio Standards for In-State Renewable Deployment: Accounting for Policy Heterogeneity." *Economics of Energy & Environmental Policy* 4(2).
- [14] **Chan, Gabriel**, John M. Reilly, Sergey Paltsev, and Y.-H. Henry Chen. 2012. "The Canadian Oil Sands Industry Under Carbon Constraints." *Energy Policy* 50: 540-550.
- [15] **Chan, Gabriel**, Robert Stavins, Robert Stowe, Richard Sweeney. 2012. "The SO₂ Allowance-Trading System and the Clean Air Act Amendments of 1990: Reflections on 20 Years of Policy Innovation." *National Tax Journal* 65 (2): 419-452.
- [16] Jenner, Steffen, **Gabriel Chan**, Rolf Frankenberger and Mathias Gabel. 2012. "What Drives States to Support Renewable Energy?" *The Energy Journal* 33 (2): 1-12.
- [17] **Chan, Gabriel**, Laura Diaz Anadon, Melissa Chan, and Audrey Lee. 2011. "Expert Elicitation of Cost, Performance, and RD&D Budgets for Coal Power with CCS." *Energy Procedia* 4: 2685-2692.
- [18] Pugh, Graham, Leon Clarke, Robert Marlay, Page Kyle, Marshall Wise, Haewon McJeon, and **Gabriel Chan**. 2011. "Energy R&D Portfolio Analysis Based on Climate Change Mitigation." *Energy Economics* 33: 634-643.

BOOK CHAPTERS (UNDERLINE INDICATES STUDENT, STAFF, OR POST-DOC)

- [1] Lenhart, Stephanie, **Gabriel Chan**, Matthew Grimley, Elizabeth Wilson. 2021. "Comparing and Contrasting the Institutional Relationships, Regulatory Frameworks, and Energy System Governance of European and U.S. Electric Cooperatives" in *Routledge Handbook of Energy Democracy*. Ed. Andrea M. Feldpausch-Parker, Danielle Endres, Tarla Rai Peterson, Stephanie L. Gomez. Routledge, Oxon, U.K., pp. 34-50.
- [2] Anadon, Laura Diaz, **Gabriel Chan**, and Audrey Lee. 2014. "Expanding and Better Targeting U.S. Investment in Energy Innovation: An Analytical Approach" in *Transforming U.S. Energy Innovation*. Ed. Laura Diaz Anadon, Matthew Bunn, and Venkatesh Narayanamurti. Cambridge University Press, Cambridge, U.K., and New York, NY, USA, pp. 36-80.

MANUSCRIPTS IN PROGRESS (DRAFTS AVAILABLE, UNDERLINE INDICATES STUDENT, STAFF, OR POST-DOC)

- [1] **Gabriel Chan** and Alexandra Klass. "Regulating for Energy Justice." Accepted at *New York University Law Review*.
- [2] Grimley, Matthew, Vivek Shastry, Dilge Güldehen Kânoğlu-Özkan, Erica Blevins, Ariane L. Beck, **Gabriel Chan**, Varun Rai. "The Grassroots Is Always Greener: Community-Based Organizations as Shared Solar Innovators in Texas and the United States." Revise and Resubmit at *Energy Research and Social Science*.
- [3] Grimley, Matthew, **Gabriel Chan**. "'Cooperative is an Oxymoron!': A Polycentric Energy Transition Perspective on Distributed Energy Deployment." Submitted.
- [4] Kolesnikov, Sergey, Anna Goldstein, Bixuan Sun, **Gabriel Chan**, Venkatesh Narayanamurti, Laura Diaz Anadon. "A framework and methodology for analyzing technology spillover processes with an application in solar photovoltaics." In Preparation.

- [5] “Sharing the Sun: Community Solar Market Status and Trends” (with Jenny Heeter, Katrina Little, Jacob Reinert, Matthew Grimley, Kaifeng Xu, and Eric O’Shaughnessy)
- [6] “Public Participation in Voluntary Green Power: Motivating Cooperative Utility Members.” (with Gilbert Michaud and Jacob Herbers).
- [7] “Developing organizational innovation systems: case studies from U.S. community solar context” (with Matthew Grimley, Dilge Kanoglu, Erica Blevins, and Minhyun Lee)
- [8] “Energy Transition without Competitive Markets: The Political Economy of Equity and Efficiency in Electricity Resource Deployment.” (with Matthew Grimley and Bixuan Sun)
- [9] “How can we study technology spillovers and their impact on clean energy innovation?” (with Sergey Kolesnikov, Anna Goldstein, Bixuan Sun, Venkatesh Narayanamurti, Laura Diaz Anadon)
- [10] “Power to, from, or for the People: Distributed Energy Resources in Public Power and Rural Cooperatives” (with Stephanie Lenhart, Matthew Grimley, and Elizabeth Wilson)

MANUSCRIPTS (DRAFTS AVAILABLE UPON REQUEST, UNDERLINE INDICATES STUDENT, STAFF, OR POST-DOC)

- [1] “A Cross-State Examination of the Community Shared Solar Landscape” (with Jacob Herbers, Ryan Streitz)
- [2] “Navigating Interests in Community Solar: Minnesota’s Municipal and Cooperative Utility Experience” (with Nicholas Neuman, Matthew Grimley, Maureen Hoffman)
- [3] “Increasing Equitable Participation in Solar Energy: Opportunities and Challenges for Community Shared Solar” (with Isaac Evans, Elizabeth Arnold, Jordan Morgan)
- [4] “The Commercialization of Publicly Funded Science: How Licensing Federal Laboratory Inventions Affects Knowledge Spillovers.”
- [5] “The Role of the CDM in Financing Wind Energy in China, 2003 – 2012” (with Joern Huenteler)
- [6] “The Additionality of Clean Development Mechanism Projects in the Chinese Wind Sector” (with Joern Huenteler)
- [7] “Improving Decision Making for Public R&D Investment in Energy: Utilizing Expert Elicitation in Parametric Models” (with Laura Diaz Anadon)
- [8] “Crossing the Divide in Studies of Innovation: A Unifying Framework for Analysis of Multilevel Innovation Systems” (with Laura Diaz Anadon, Kira Matus, Suerie Moon, Alicia Harley, Sharmila Murthy, Vanessa Timmer, William Clark)
- [9] “Socio-Technical Characteristics as Determinants of Technology Innovation for Sustainable Development: Building Bridges Across Sectors and Disciplines” (with Laura Diaz Anadon, Kira Matus, Suerie Moon, Alicia Harley, Sharmila Murthy, Vanessa Timmer, William Clark)
- [10] “Innovation for Sustainable Development: A Systems Perspective for Policy Makers and Other Stakeholders” (with Laura Diaz Anadon, Kira Matus, Suerie Moon, Alicia Harley, Sharmila Murthy, Vanessa Timmer, William Clark)
- [11] “The Global Innovation System: A Typology of Transnational Functions for Enhancing the Benefits of Technology for Sustainable Development” (with Laura Diaz Anadon, Kira Matus, Suerie Moon, Alicia Harley, Sharmila Murthy, Vanessa Timmer, William Clark)

TECHNICAL REPORTS AND DISCUSSION PAPERS (UNDERLINE INDICATES STUDENT, STAFF, OR POST-DOC)

- [1] **Gabriel Chan**, Matthew Grimley, Jamison Stallman, Joshua Anderson, Mark Teklinski. January 2022. *Planning for Equitable Solar Deployment with Electric Cooperatives*. University of Minnesota Center for Science Technology and Environmental Policy. Technical Report.

- [2] Ariane Beck, **Gabriel Chan**, Varun Rai, Matthew Grimley, John Cornwell, Matthew Jones, Vivek Shastry, Dilge Kanoglu, Erica Blevins, Christopher Matos, Kirsten Smith, Minhyun Lee, Erik Funkhouser. September 2020. *Scaling Community Solar in Texas: Barriers, Strategies, and Roadmap*. University of Texas-Austin, LBJ School of Public Affairs and University of Minnesota-Twin Cities, Humphrey School of Public Affairs. Technical Report.
- [3] **Gabriel Chan**, Stephanie Lenhart, Lindsey Forsberg, Matthew Grimley, and Elizabeth Wilson. February 2019. *Barriers and Opportunities for Distributed Energy Resources in Minnesota's Municipal Utilities and Electric Cooperatives*. University of Minnesota Center for Science Technology and Environmental Policy. Technical Report.
- “Barriers and Opportunities for Distributed Energy Resources in Minnesota’s Municipal Utilities and Electric Cooperatives.” University of Minnesota Center for Science Technology and Environmental Policy. Policy Brief. (February 2019)
- [4] **Gabriel Chan**, Jordan Morgan, and Ryan Streitz. February 2019. *Solar for Humanity: Nonprofit Solar Partnerships with Habitat for Humanity: Landscape and Financial Analysis with Applications for Minnesota*. University of Minnesota Center for Science Technology and Environmental Policy. Technical Report.
- [5] **Chan, Gabriel**, Lindsey Forsberg, Peder Garnaas-Halvorsen, Samantha Holte, and DaSeul Kim. September 2018. *Issue Linkage in the Climate Regime: Gender Policies in Climate Finance*. University of Minnesota Center for Science Technology and Environmental Policy. Technical Report
- “Issue Linkage in the Climate Regime: Gender Policies in Climate Finance.” University of Minnesota Center for Science Technology and Environmental Policy. Policy Brief. (June 2018)
- “Linking Gender Policy and Climate Finance.” University of Minnesota Center for Science Technology and Environmental Policy. Policy Brief. (November 2017)
- [6] **Chan, Gabriel**, Matthew Grimley, Elizabeth Arnold, Isaac Evans, Jacob Herbers, Maureen Hoffman, Benjamin Ihde, Poulomi Mazumder, Jordan Morgan, Nick Neuman, and Ryan Streitz. March 2018. *Community Shared Solar in Minnesota: Learning from the First 300 Megawatts*. University of Minnesota Center for Science Technology and Environmental Policy. Technical Report.
- “Community Shared Solar in Minnesota: Learning from the First 300 Megawatts.” University of Minnesota Center for Science Technology and Environmental Policy. Policy Brief. (March 2018)
- [7] Bin-Nun, Amitai Y, **Gabriel Chan**, Laura Diaz Anadon, Venkatesh Narayanamurti, and Sarah Jane Maxted. November 2017. *The Department of Energy National Laboratories: Organizational Design and Management Strategies to Improve Federal Energy Innovation and Technology Transfer to the Private Sector*. Environment and Natural Resources Program and the Science, Technology, and Public Policy Program, Belfer Center for Science and International Affairs, Harvard University. Technical Report.
- [8] **Gabriel Chan**, and Laura Diaz Anadon. December 2016. “Improving decision making for public R&D investment in energy: utilizing expert elicitation in parametric models.” Cambridge University, Energy Policy Research Group Working Paper Economics: 1682. Discussion Paper.
- [9] Binz, Christian, **Gabriel Chan**, Claudia Doblinger, Joern Huneteler, Dongbo Shi, Tian Tang, Lei Xu, and Laura Diaz Anadon. 2015. “Energy Technology Innovation Policy in the Backdrop of the U.S.-China Emissions Agreement.” Energy Technology Innovation Policy Research Group, Belfer Center for Science and International Affairs. Workshop Report.
- [10] Harley, Alicia, Sharmila Murthy, Laura Diaz Anadon, **Gabriel Chan**, Kira Matus, Suerie Moon, Vanessa Timmer, and William C. Clark. 2014. “Innovation and Access to Technologies for Sustainable Development: A Global Systems Perspective.” Harvard Sustainability Science Working Paper #2014-02. Discussion Paper.
- [11] Anadon, Laura Diaz, Kira Matus, Suerie Moon, **Gabriel Chan**, Alicia Harley, Sharmila Murthy, Ahmed Abdel Latif, Kathleen Araujo, Kayje Booker, Hyundo Choi, Kristian Dubrawski, Lonja Friedlander, Christina Ingersoll, Erin Kempster, Laura Pereira, Jennie Stephens, Vanessa Timmer, Lee Vinsel, and William C. Clark. 2014. “Innovation and Access to Technologies for Sustainable Development: Diagnosing Weaknesses and Identifying Interventions in the Transnational Arena.” Harvard Sustainability Science Working Paper #2014-01. Discussion Paper.

- [12] Anadon, Laura Diaz, Valentina Bosetti, **Gabriel Chan**, Gregory Nemet, and Elena Verdolini. 2014. “Energy Technology Expert Elicitations for Policy: Workshops, Modeling, and Meta-Analysis.” Belfer Center Discussion Paper #2014-08. Discussion Paper.
- [13] **Gabriel Chan**, Mathias Gabel, Steffen Jenner, Stephan Schindele. 2011. “BRIC by BRIC: Governance and Energy Security in Developing Countries.” University of Tübingen Institute of Political Science Working Paper #47-2011. Discussion Paper.
- [14] Anadon, Laura Diaz, Matthew Bunn, **Gabriel Chan**, Melissa Chan, Charles Jones, Ruud Kempener, Audrey Lee, Nathaniel Logar, and Venkatesh Narayanamurti. 2011. “Transforming U.S. Energy Innovation.” Energy Technology Innovation Policy Research Group, Belfer Center for Science and International Affairs. Technical Report.
- [15] Anadon, Laura Diaz, Matthew Bunn, **Gabriel Chan**, Melissa Chan, Kelly Sims Gallagher, Charles Jones, Ruud Kempener, Audrey Lee, Venkatesh Narayanamurti. 2010. “DOE FY 2011 Budget Request for Energy Research, Development, Demonstration, and Deployment: Analysis and Recommendations.” Energy Technology Innovation Policy Research Group, Belfer Center for Science and International Affairs. Technical Report.
- [16] **Gabriel Chan**. 2009. “Trade and the Environment: The Political Economy of CO₂ Emission Leakage with Analysis of the Steel and Oil Sands Industries.” M.I.T. Undergraduate Thesis.

REGULATORY FILINGS AND LEGISLATIVE TESTIMONY (UNDERLINE INDICATES STUDENT, STAFF, OR POST-DOC)

- [1] **Gabriel Chan** and Elise Harrington. February 7, 2022. “Weatherization in Minnesota Compared to Other States.” Oral testimony before the Minnesota House of Representatives Committee on Energy and Climate Finance and Policy.
- [2] **Gabriel Chan**. December 3, 2021. “Re: Should the Commission approve Xcel Energy’s calculation of the Value of Solar (VOS) rate for 2022, and the Company’s proposed 2022 VOS vintage year bill credit tariff sheets?” Minnesota Public Utilities Commission Docket M-13-867. Public Comments.
- [3] **Gabriel Chan**, Matthew Grimley, Katrina Little, and Dillon Cummins. June 21, 2021. “Re: Should the Commission Extend the Residential Adder for Xcel Energy’s Community Solar Garden (CSG) Program?” Minnesota Public Utilities Commission Docket M-13-867. Public Comments. (*MN PUC staff briefing paper derived 1 decision option citing this comment*).
- [4] **Gabriel Chan**. March 9, 2021. “Testimony on the Value of Solar Tariff.” Oral testimony before the Minnesota House of Representatives Committee on Energy and Climate Finance and Policy.
- [5] **Gabriel Chan**. November 24, 2020. “Re: Should the Commission approve Xcel Energy’s calculation of the Value of Solar (VOS) rate for 2021, and the Company’s proposed 2021 VOS vintage year bill credit tariff sheets?” Minnesota Public Utilities Commission Docket M-13-867. Public Comments. (*MN PUC staff briefing paper derived 7 decision options citing this comment*).
- [6] **Gabriel Chan**, Matthew Grimley, Katrina Little, Bhavin Pradhan, Jacob Reinert, and Nick Stumo-Langer. October 16, 2020. “Re: In the Matter of an Inquiry into Utility Investments that may Assist in Minnesota’s Economic Recovery from the COVID-19 Pandemic.” Minnesota Public Utilities Commission Docket CI-20-492 (also filed in M-20-716 and CI-20-375). Public Comments.
- [7] **Gabriel Chan**. June 24, 2020. “Re: In the Matter of the Application of CONSUMERS ENERGY COMPANY for authority to increase its rates for the generation and distribution of electricity and for other relief.” Michigan Public Service Commission Case No. U-20697. Direct Testimony.
- [8] **Gabriel Chan** and Matthew Grimley. May 5, 2020. “Re: Methodologies for the Avoided Distribution Cost Component of the Minnesota Value of Solar.” Minnesota Public Utilities Commission Docket M-13-867 and M-14-65. Public Comments.
- [9] **Gabriel Chan**. February 25, 2020. “Testimony on the Value of Solar Tariff and Minnesota’s Community Solar Garden Program.” Oral testimony before the Minnesota House of Representatives Energy and Climate Finance and Policy Division for Bill H.F. 3368.
- [10] **Gabriel Chan**. February 7, 2020. “Cooperative electricity generation and distribution.” Oral testimony before the Minnesota House of Representatives Energy and Climate Finance and Policy Division.

- [11] **Gabriel Chan**, Matthew Grimley, and Bixuan Sun. August 23, 2019. “Re: Should the Commission adopt Xcel Energy’s proposal for an alternative method for calculating the Value of Solar (VOS) avoided distribution cost for the Company’s Community Solar Garden program?” Minnesota Public Utilities Commission Docket M-13-867. Public Comments and Invited Testimony before the Commission on October 31, 2019 (*MN PUC staff briefing paper derived 5 decision options citing this comment and the MN PUC order on December 3, 2019 cited this comment in the establishing a stakeholder working group*).
- [12] **Gabriel Chan**. January 21, 2019. “Ratepayer Impact of Xcel Energy’s Community Solar Garden Program.” Oral testimony before the Minnesota House of Representatives Energy and Climate Finance and Policy Division for Bill H.F. 2625.
- [13] **Gabriel Chan**. January 21, 2019. “Ratepayer Impact of Xcel Energy’s Community Solar Garden Program.” Oral testimony before the Minnesota Senate Energy and Utilities Finance and Policy Committee for Bill S.F. 1891.
- [14] **Gabriel Chan**, Matthew Grimley, and Nick Stumo-Langer. December 13, 2018. “Re: Re: Should the Commission approve Xcel Energy’s 2019 VOS calculation and proposed 2019 VOS vintage year bill credit tariff sheets?” Minnesota Public Utilities Commission Docket M-13-867. Public Comments.
- [15] **Gabriel Chan**, Matthew Grimley, and Nick Stumo-Langer. November 27, 2018. “Re: Should the Commission approve Xcel Energy’s 2019 VOS calculation and proposed 2019 VOS vintage year bill credit tariff sheets?” Minnesota Public Utilities Commission Docket M-13-867. Public Comments and Invited Testimony before the Commission on January 31, 2019 (*MN PUC staff briefing paper derived 6 decision options citing this comment*).
- [16] **Gabriel Chan**, Isaac Evans, and Matthew Grimley. April 6, 2018. “Re: What action should the Commission take based on Xcel Energy’s (Xcel’s) February 1, 2018 filing?” Minnesota Public Utilities Commission Docket M-13-867. Public Comments (*MN PUC staff briefing paper derived 1 decision option citing this comment*).
- [17] Narayanamurti, Venkatesh, Laura Diaz Anadon, **Gabriel Chan**, and Amitai Bin-Nun. 2015. Written Testimony to the U.S. Senate Appropriations Subcommittee on Energy & Water Development Hearing on “Securing America’s Future: Realizing the Potential of the DOE National Laboratories.”

OP-EDS, POLICY BRIEFS, ESSAYS, AND PODCASTS (UNDERLINE INDICATES STUDENT OR POST-DOC)

- [1] **Gabriel Chan**. February 3, 2022. “What Is the Value of Solar?” *Local Energy Rules* (interview with ILSR’s John Farrell). Podcast.
- [2] **Gabriel Chan** and Keith Taylor. July 28, 2021. “How Clean Energy Development Can be Equitable for Rural Communities.” *Power Plays* (interview with CoBank’s Teri Viswanath and Tamara Reynolds). Podcast.
- [3] **Gabriel Chan**. June 15, 2021. “Using Engaged Scholarship to Advance Clean Energy.” *Energy Futures: Conversations on Where We’re Headed* (interview with CERTs’ Marie Donahue). Podcast.
- [4] **Gabriel Chan**, Lindsey Forsberg, and Matthew Grimley. December 20, 2018. “After Xcel Energy’s Zero-Carbon Pledge, Let’s Make Sure the Public Benefits.” *MinnPost*. Op-Ed.
- [5] **Gabriel Chan**, Isaac Evans, Elizabeth Arnold, Matthew Grimley, Jacob Herbers, Benjamin Ihde, Poulomi Mazumder, Jordan Morgan, Nick Neuman, and Ryan Streitz. March 2018. “Broadening Access to Solar Energy: Community Shared Solar Programs.” University of Minnesota Center for Science Technology and Environmental Policy. Policy Brief.
- [6] **Gabriel Chan** and Jacob Herbers. January 30, 2018. “Solar tariffs more likely to cut than protect jobs.” *Star Tribune*. Op-Ed.
- [7] Ellen Anderson, **Gabriel Chan**, and Melissa Hortman. June 7, 2017. “Minnesota steps up to the plate on climate.” *Star Tribune*. Op-Ed.
- [8] **Gabriel Chan**. May 19, 2017. “Climate and Environmental Policy in Trump’s First 100 Days: A Summary through a Gender Lens.” *Gender Policy Report*. Essay.
- [9] **Gabriel Chan**. January 30, 2017. “Public Funding for Energy Research and Development.” *Civios*. Podcast.
- [10] **Gabriel Chan** and Peder Garnaas-Halvorson. January 16, 2017. “What’s to Come for More Gender-Responsive Climate Policy?” *Gender Policy Report*. Essay.

- [11] **Gabriel Chan**, [Jill Rook](#), and [Ashfaquul Chowdhury](#). November 2016. “Cooperative Climate Change R&D That Works.” University of Minnesota Center for Science Technology and Environmental Policy. Policy Brief.
- [12] **Gabriel Chan**, [Haley Bloomquist](#), [Brianna Denk](#), and [Alexandra Hillstrom](#). November 2016. “Guidelines for a Sectoral Sustainable Development Mechanism in the Post-2020 Climate Regime.” University of Minnesota Center for Science Technology and Environmental Policy. Policy Brief.
- [13] [Karnamadakala Rahul Sharma](#), and **Gabriel Chan**. October 31, 2016. “Energy Poverty: Electrification and Well-Being.” *Nature: Energy - News & Views* 1 (Article 16171). Review.
- [14] Laura Diaz Anadon, **Gabriel Chan**, Amitai Bin-Nun, and Venkatesh Narayanamurti. October 25, 2016. “How to Fix the National Laboratories.” *The National Interest*. Op-Ed.

DATASETS

- [1] **Gabriel Chan**, Jenny Heeter, Kaifeng Xu. December 2021 (updated). “Sharing the Sun: Community Solar Project List” National Renewable Energy Laboratory. <https://www.osti.gov/biblio/1845718>

TEACHING

- PA5790: Energy Transition in Rural America* (Graduate level)
Humphrey School of Public Affairs, University of Minnesota
Spring 2022
- PA5721: Energy Systems and Policy* (Graduate level)
Humphrey School of Public Affairs, University of Minnesota
Co-Instructor: Jenny Edwards
Spring 2021
- PA5790: Energy Justice Reading Group* (Graduate level)
Humphrey School of Public Affairs, University of Minnesota
Fall 2019
- ARCH 5250/PA 5790: Global Convergence Laboratory* (Graduate level, study “abroad” course in Puerto Rico)
Humphrey School of Public Affairs and School of Architecture, University of Minnesota
Co-Instructors: Prof. Jacob Mans and Megan Vorhees
Partners: National Institute for Energy and Island Sustainability
Spring 2019, Spring 2020
- PA 5045: Statistics for Public Affairs, Accelerated* (Masters level)
Humphrey School of Public Affairs, University of Minnesota
Fall 2018, Fall 2019, Fall 2020, Fall 2021
- PA 5031: Empirical Analysis I* (Masters level)
Humphrey School of Public Affairs, University of Minnesota
Fall 2017
- PA 5724: Climate Change Policy* (Masters level)
Humphrey School of Public Affairs, University of Minnesota
Fall 2016, Fall 2017, Fall 2018, Fall 2020, Fall 2021
- PA 5790: International Climate Change Policy: The United Nations Framework Convention on Climate Change COP22* (Masters level, study abroad course in Marrakech, Morocco)
Co-Instructors: Hon. Melissa Hortman and Ellen Anderson
Humphrey School of Public Affairs, University of Minnesota
Fall 2016
- PA 5711: Science, Technology, and Environmental Policy* (Masters level)
Humphrey School of Public Affairs, University of Minnesota
Fall 2015, Fall 2016, Fall 2017, Fall 2018

PA 8706: *Interdisciplinary Research Seminar on Science, Technology, and Environmental Policy* (Ph.D. level)
Humphrey School of Public Affairs, University of Minnesota
Fall 2015

CONSULTING AND OTHER PROFESSIONAL POSITIONS

- 2020 – 2021 Great River Energy
Project Lead for the Demand Side Management Innovation Initiative
- 2021 – 2022 Texas Energy Poverty Research Institute
Research Advisor for National Science Foundation INCLUDES Planning Grant on 331
STEM:Energy 3 Universities, in 3 Cities, 1 Vision
- 2021 – 2022 Citizens Utility Board of Minnesota
Research Support for Project on Analysis of New or Modified Energy Efficiency Programs to
Increase Energy Savings of Underserved Populations
- 2020 The Ecology Center, Environmental Law & Policy Center, Great Lakes Renewable Energy
Association, Solar Energy Industries Association, and Vote Solar
Retained Expert Witness/Consultant for Michigan Case U-20697 (Consumers Energy Rate Case)
- 2018 – 2019 Cooperative Energy Futures
Consultant for the U.S. Department of Energy Solar in Your Community Challenge
- 2012 – 2015 Belfer Center for Science and International Affairs, Harvard Kennedy School
Research Fellow, Energy Technology Innovation Policy Group
- 2011 – 2014 Intergovernmental Panel on Climate Change 5th Assessment Report: Working Group III
Chapter Scientist & Contributing Author, “International Cooperation: Agreements and Instruments”
Contributing Author, “Working Group III: Technical Summary”
- 2007, 2009 U.S. Department of Energy
Intern, Climate Change Technology Program

RESEARCH GRANTS, FELLOWSHIPS, AND AWARDS

- 2022 Minnesota Department of Transportation for “Feasibility Study: State-Tribal Partnership to Support
Solar Energy.” **PI: Gabriel Chan**, Partners: Red Lake Nation. (\$39,348)
- 2021 – 2022 Minnesota Department of Commerce for “Landscape Analysis of Weatherization Program Scale-
Up.” **PI: Gabriel Chan**, Co-PI: Elise Harrington. (\$61,023)
- 2021 – 2024 U.S. Department of Agriculture for “Economic and Environmental Potential of Solar for Farmers,
Ranchers, and Society.” PI: Eric Lonsdorf (University of Minnesota), **Co-PI: Gabriel Chan**. (Award
Total: \$499,370, Gabriel Chan Total: \$65,730)
- 2021 – 2023 McKnight Foundation for “Municipal and Cooperative Utility Engagement Platform.” **PI: Gabriel
Chan**. (\$100,000)
- 2021 – 2022 National Association of State Energy Offices for “Increase Low-to-Moderate Income (LMI) Access
to Community Solar Gardens (CSGs) via Utilization of Energy Assistance Program Resources.” PI:
Minnesota Department of Commerce. **Sub-Awardee** (Award Total: \$32,211, Gabriel Chan Total:
\$5,333)
- 2021 – 2022 University of Minnesota Robert J. Jones Urban Research and Outreach-Engagement Center (UROC)
Research Agenda for “eHEAT Dataset-based Support Tool for Energy Assistance Implementation in
Minnesota.” **PI: Gabriel Chan**. (\$15,000 + \$10,000 departmental match)

- 2020 – 2021 U.S. Department of Energy: Solar Energy Innovation Network for “Organizational Innovation for Equitable Solar Deployment with Electric Cooperatives.” **PI: Gabriel Chan**, Team Lead
Organization: East River Electric Cooperative, Partners and Advisors: Clean Energy Resource Teams, Great Plains Institute, Renville-Sibley Cooperative Power Association, Lyon-Lincoln Electric Cooperative, Sioux Valley Energy, Bon Homme Yankton Electric Association, STAR Energy Services, Minnesota Farmer’s Union. (\$125,000)
- 2020 – 2021 McKnight Foundation for “Municipal and Cooperative Utility Engagement Platform.” **PI: Gabriel Chan**, Partners: Clean Energy Resource Teams, Great Plains Institute. (\$100,000)
- 2019 – 2020 Mitchell Foundation for “Trajectories of Change for Scaling Up Community Solar in Texas.” PI: Varun Rai (University of Texas-Austin), **Co-PI: Gabriel Chan**. (Award Total: \$100,000, University of Minnesota Sub-Award: \$65,000)
- 2019 – 2020 McKnight Foundation for “Low-Income Access to Community Solar.” **PI: Gabriel Chan**, Partners: GRID Alternatives, Fresh Energy. (\$78,000)
- 2018 – 2021 U.S. Department of Energy Solar Energy Technology Office for “Sharing the Sun: Community Solar Data and Cost.” PI: Jenny Heeter (National Renewable Energy Lab). **Sub-Award PI: Gabriel Chan**. (Award Total: \$579,669, University of Minnesota Sub-Award: \$125,805)
- 2018 – 2021 Alfred P. Sloan Foundation for “What Factor Drive Innovation in Energy Technologies? The Role of Technology Spillovers and Government Investment.” PI: Venkatesh Narayanamurti, Harvard University, **Co-PI: Gabriel Chan**, Co-PI: Laura Diaz Anadon, Cambridge University. (Award Total: \$560,788, University of Minnesota Sub-Award: \$215,865)
- 2018 University of Minnesota Global Programs & Strategy Alliance, International Travel Grant. (\$1,500)
- 2018 – 2019 Hennepin County for “Fleet Electrification Project” to University of Minnesota Institute on the Environment Link program. PI: Jeff Standish. **Advisory Faculty: Gabriel Chan**. (Award Total: \$95,000, Gabriel Chan Total: \$7,142)
- 2018 University of Minnesota Central Regional Sustainable Development Partnership for “Solar for Humanity” **PI: Gabriel Chan**, Partners: Rural Renewable Energy Alliance. (\$21,000)
- 2017 – 2018 McKnight Foundation for “Technological and Institutional Innovation in Minnesota’s Rural Electric Cooperatives and Municipal Utilities.” **PI: Gabriel Chan**, Co-PI: Elizabeth Wilson, Dartmouth University. (\$100,000)
- 2017 – 2018 University of Minnesota Center for Urban and Regional Affairs, Faculty Interactive Research Program for “Sharing the Same Sun: A Collaborative Research Initiative on Community Solar Programs: Part 1 – Lessons from Minnesota.” **PI: Gabriel Chan**. (\$45,427)
- 2017 – 2018 University of Minnesota Office of the Vice President for Research, Grant-in-Aid of Research, Artistry, and Scholarship for “Sharing the Same Sun: A Collaborative Research Initiative on Community Solar Programs: Part 2 – Cross-State Comparison.” **PI: Gabriel Chan**. (\$34,319)
- 2017 Multicultural Research Award, University of Minnesota for “Understanding Gender-Responsiveness of Multilateral Climate Finance.” **PI: Gabriel Chan**. (\$7,000)
- 2016 - 2018 National Science Foundation, Sustainability Research Network (SRN): Sustainable Healthy Cities for “Integrated Urban Infrastructure Solutions for Environmentally Sustainable, Healthy and Livable Cities.” Lead PI: Anu Ramaswami, Co-PIs: Patricia Culligan, Armistead Russell, Yingling Fan, Benjamin Orlove. **Research Faculty: Gabriel Chan** (among 21 research faculty). (Grant total: \$12,000,000, Gabriel Chan Supervisory Responsibility: \$122,937)
- 2014 – 2015 Dissertation Completion Fellowship, Harvard Graduate Society
- 2012 – 2015 Pre-Doctoral Fellowship, Belfer Center for Science, Technology, and Public Policy (\$55,000)
- 2011 – 2012 Pre-Doctoral Fellowship, Harvard Sustainability Science Program (\$17,500)
- 2010 – 2012 Fellow, Harvard Graduate Consortium on Energy and the Environment (\$6,000)

- 2010 – 2011 Vicki-Norberg Bohm Fellowship, Harvard Kennedy School for “The U.S. Energy Technology Innovation System: A Cross-Sectoral Investigation of the Interface between Technologists, Policymakers and Financiers.” (\$7,000)
- 2009 – 2015 Pre-doctoral fellow, Harvard Environmental Economics Program
- 2009 – 2011 Doctoral Fellowship, Harvard Kennedy School
- 2009 U.S. Department of Energy Scholars Program

HONORS AND RECOGNITION

- 2019-2021 University of Minnesota McKnight Land-Grant Professorship “to advance the careers of new assistant professors at a crucial point in their professional lives.” (Award: \$50,000)
- 2019 Named to Midwest Energy News’ 40 Under 40 “highlighting emerging leaders throughout the region and their work in America’s transition to a clean energy economy”
- 2019 University of Minnesota Institute on the Environment, One IonE Affiliate Award to recognize “leadership in what it means to engage with the Institute on the Environment”

ACADEMIC CONFERENCES, WORKSHOPS, AND INVITED SEMINARS (INCLUDES SCHEDULED)

- 2022 University of Arizona
Arizona State University
Georgetown University
APPAM Fall Research Conference (presenter; discussant)
- 2021 Rutgers University Energy Institute (Energy Policy Seminar Series)
University of California – Davis (Community Economic Development Innovations for a Post-Pandemic Economy)
University of Nebraska College of Law (Rural Reconciliation Project)
- 2020 Dartmouth College (New Energy seminar)
University of Minnesota (STEP Seminar, Institute on the Environment Second Mondays Series, Law School: Squaretable)
2nd Workshop on What Factors Drive Innovation in Energy Technologies (co-convener, Cambridge)
APPAM Fall Research Conference (presenter; discussant)
- 2019 University of Minnesota (STEP Seminar x2, Diversity through the Disciplines, Law School Faculty Work in Progress Seminar)
Sustainable Healthy Cities NSF SRN Annual Workshop (presenter)
ITIF Energy Innovation Boot Camp for Early Career Scholars (workshop participant)
APPAM Fall Research Conference (presenter x2; discussant)
Energy Policy Research Conference (presenter)
Energy Justice Workshop (Indiana University; workshop participant)
1st Workshop on What Factors Drive Innovation in Energy Technologies (co-convener, Harvard)
RE-AMP Network Workshop on Translating Across Boundaries: A Convening of Academics and Advocates on Climate Change (workshop participant)
American Solar Energy Society National Conference (presenter)
International Conference on Energy Research & Social Science (presenter)
RISE 2019: Transforming University Engagement in Pre- and Post-Disaster Environments: Lessons from Puerto Rico (presenter, workshop participant)

- 2018
 Indiana University School of Public and Environmental Affairs (seminar)
 Arizona State University (workshop participant)
 Adaptation Futures Conference (Cape Town, South Africa)
 American Solar Energy Society National Solar Conference (presenter)
 Energy Policy Research Conference (presenter)
 Energy Policy Institute at the U of Chicago: Clean Energy Innovation (workshop participant)
 University of Minnesota (Freeman Seminar; STEP Seminar),
 APPAM Fall Research Conference (presenter x2; poster; discussant)
- 2017
 Association for Public Policy Analysis & Management (presenter; discussant)
 US/International Association for Energy Economics (presenter)
 Energy Policy Research Conference (presenter)
 APPAM International Conference (presenter; discussant)
 Danish Technical University (seminar)
 EU CARISMA Project (workshop participant)
 Sustainable Healthy Cities NSF SRN Annual Workshop (presenter)
- 2016
 Carnegie Mellon Center for Climate and Energy Decision Making (workshop participant)
 Harvard Sustainability Science Symposium (presenter)
 Association of Environmental and Resource Economists Summer Conference (presenter)
 Workshop on Making Technological Innovation Work for Sustainable Development (UCL, co-convener)
 Sustainable Healthy Cities NSF SRN Annual Workshop (workshop participant)
 Association for Public Policy Analysis & Management (presenter x2; discussant)
 Municipal Utilities Workshop (Florida State University, presenter)
- 2015
 University of Minnesota Humphrey School (seminar x2)
 University of Minnesota Applied Economics (seminar)
 Heartland Environmental & Resource Economics Workshop at Illinois (UI-Urbana-Champaign, presenter)
 University of Colorado Boulder Environmental and Resource Economics Workshop (presenter)
 Academy of Management (presenter)
 Association for Public Policy Analysis & Management (presenter; discussant)
- 2014
 International Energy Agency (seminar, workshop participant)
 Technology Transfer Society Conference (presenter)
 Harvard Kennedy School Energy Policy Seminar (seminar)
 INFORMS Annual Meeting (presenter)
 Harvard Business School Science Based Business Seminar (seminar)
- 2013
 Harvard Kennedy School Energy Policy Seminar (seminar)
 Harvard Business School Science Based Business Seminar (seminar)
 Atlanta Conference on Science and Innovation Policy (presenter)
 NC State University Camp Resources (presenter)
- 2012
 International Conference on Science and Technology Indicators (presenter)
 Snowmass Climate Change Impacts and Integrated Assessment Workshop XVIII (presenter)

- 2011 International Energy Workshop (presenter)
 2010 Pacific Northwest National Laboratory (workshop)
 World Student Environmental Summit (keynote)
 International Conference on Greenhouse Gas Technologies (presenter)

REFeree SERVICE

Journal of Policy Analysis and Management, Environmental Research Letters, Climate Policy, Nature Climate Change, Proceedings of the National Academies of Science, Environmental and Resource Economics, Energy Economics, Energy Policy, Energy Research & Social Science, The Journal of Technology Transfer, Cambridge University Press (book manuscript), Journal of Cleaner Production, Environmental Policy and Governance, Review of Environmental Economics and Policy, Journal of Benefit Cost Analysis, Sustainable Production and Consumption, International Environmental Agreements: Politics, Law and Economics, Progress in Photovoltaics, American Solar Energy Society Annual Conference Referee, Journal of Policy and Management, Renewable & Sustainable Energy Reviews, APPAM Fall Research Conference

SERVICE TO THE PUBLIC AND THE PROFESSION OUTSIDE OF THE UNIVERSITY OF MINNESOTA

- Board of Directors, Minnesota Center for Environmental Advocacy (2020 -); Strategic Plan Committee Member
 Advisor, Cleveland Owns report on “Equitable Community Solar: Policy and Program Guidance for Community Solar Programs that Promote Racial and Economic Equity” (2019 - 2020)
 Advisor, Cooperative Energy Futures report for “Response to City of Minneapolis Request for Information for Electricity from Renewable Sources for Minneapolis Municipal Operations and Community-Wide Goals” (2019)
 Study Author, Hennepin County reports on “Electric Vehicle Fleet Conversion Study” and “Hennepin County’s Diesel Vehicles: CNG as Alternative Fuel?” with Charles Noble, Jeff Standish, Chelsea Ray, and Tim Smith (2018 - 2019)
 Member, Study Advisory Committee to the Energy Transition Lab, Cadmus Group, Institute for Local Self-Reliance, and the City of Minneapolis Study on “Tariffed On-Bill Financing Feasibility” (2019)
 Reviewer, U.S. Department of Energy Solar in Your Community Challenge (2019)
 Grant Reviewer, Research Grants Council of Hong Kong (2018)
 Member, Motley Sustainability Advisory Council (2018)
 Member, Advisory Committee, Midwest Energy News 40 Under 40 (2018)
 Grant Reviewer, Alfred P. Sloan Foundation (2017)

SERVICE TO THE UNIVERSITY OF MINNESOTA AND HUMPHREY SCHOOL OF PUBLIC AFFAIRS

- Member, University of Minnesota Chief Sustainability Officer Search Committee (2021 - 2022)
 Member, Humphrey School Open Rank Professor in Leadership and Management Search Committee (2021)
 Faculty Advisor, Renewable Energy Graduate Cohort, University of Minnesota (2021 -)
 Senator, University of Minnesota Faculty Senate (2021 -)
 Member, Curriculum Committee, University of Minnesota Humphrey School (2020 -)
 Faculty Advisor, Energy, Environment, and Policy Club student group (2019 -)
 Faculty Advisor, Law, Policy, and Business Collaborative on Energy and Environment student group (2019 -)
 Member, Humphrey School Open Rank Professor in STEP Search Committee (2019 - 2020)
 Chair, Institute on the Environment Associates Advisory Board (2018 - 2020)
 Member, Associate Directors Search Committee, University of Minnesota Institute on the Environment (2018 - 2019)
 Member, Strategic Planning Advisory Committee, University of Minnesota Energy Transition Lab (2018 - 2019)

Member, Faculty Leadership Council, University of Minnesota Institute on the Environment (2017 - 2020);
Engagement Working Group Chair

Curator (Built & Natural Environment Area), Gender Policy Report, University of Minnesota (2017 -)

Member, Faculty Advisory Board, University of Minnesota Acara Impact Entrepreneurship Program (2016 - 2021)

Member, Ph.D. Committee, University of Minnesota Humphrey School (2016 - 2019)

Member, Humphrey School Assistant Professor in STEP Search Committee (2017 - 2018)

Co-Chair, Humphrey School Associate Dean Search Committee (2017)

Grant Reviewer, University of Minnesota Interdisciplinary Perspectives on International Development (2016)

Grant Reviewer, UMN Office of the Vice President for Research Serendipity Grants on Renewable Energy (2015)

MEDIA APPEARANCES

Feb 16, 2022	S&P Global. Quoted in “Tri-State strife over cost, coal highlights energy transition challenge.”
Jan 19, 2022	MPR News. Quoted in “Some rural co-ops embrace renewable energy, keep rates flat.”
Jan 19, 2022	Midwest Energy News. Quoted in “A Minnesota co-op credits clean energy transition for stabilizing wholesale rates.”
Nov 11, 2021	Minnesota Daily. Quoted in “New climate series aims to amplify student voices in climate change discussions.”
Oct 25, 2021	MPR News. Radio interview for “Centenarian Tom Swain and a younger U professor kick off a climate change series.”
Sep 23, 2021	Midwest Energy News. Quoted in “In Cleveland, a potential model for equitable, community-owned solar.”
Sep 21, 2021	Star Tribune. Quoted in “Tina Smith pushes climate program despite slim Democratic margins.”
Aug 26, 2021	Midwest Energy News. Quoted in “From smart meters to big batteries, co-ops emerge as clean grid laboratories.”
Feb 25, 2021	MinnPost. Interviewed in “The U of M’s Gabriel Chan on why Texas’ energy grid failed — and what it means for Minnesota.”
Feb 17, 2021	Inside Climate News. Quoted in “How Does a Utility Turn a Net-Zero Vision into Reality? That’s What They’re Arguing About in Minnesota.”
Jun 24, 2021	Minnesota Monthly. Quoted in “How Minnesota Can Power a Greener, Cleaner Future.”
Jan 26, 2021	Bloomberg Green. Quoted in “Solving America’s Solar Inequality Starts In the Neighborhood.”
Nov 13, 2020	Minnesota Daily. Quoted in “UMN alumni lead change in energy and environmental justice work.”
Nov 2, 2020	Energywire. Quoted in “3 state battles could swing zero-carbon energy plans.”
Aug 8, 2020	Clean Technica. Quoted in “The Value of Rooftop Solar Power In Michigan: 24 Cents Per kWh.”
Jun 29, 2020	PV Magazine. Quoted in “SEIA finds rooftop solar is worth 24¢/kWh in Michigan.”
Jun 16, 2020	Midwest Energy News. Quoted in “Utility lobbying and policy inattention hinder community solar, study finds.”
Apr 20, 2020	Midwest Energy News. Research project profiled in “Minnesota researcher studies how rural co-ops can build solar capacity.”
Feb 28, 2020	Bloomberg Businessweek. Quoted in “Google Goes Green with Others Helping to Foot the Bill.”
Feb 13, 2020	Inside Climate News. Quoted in “Inside Clean Energy: The Case for Optimism.”

Feb 6, 2020	MPR News: Climate Cast. Radio interview for “MN students were in Puerto Rico learning about energy resilience when a quake knocked the power out” which covers our class.
Jan 31, 2020	Humphrey School News. Quoted in “‘Surreal’ Experience for UMN Students Who Were in Puerto Rico During Earthquakes” which covers our class.
Jan 30, 2020	KMSP (Fox Minnesota). Television interview for “U of M students studying how to respond to natural disasters visit Puerto Rico as earthquakes hit country” which covers our class.
Jan 3, 2020	Midwest Energy News. Profiled in “Minnesota academic pursues ‘engaged scholarship’ on clean energy policy.”
Dec 15, 2019	NPR. Quoted in “Powered by faith, religious groups emerge as a conduit for a just solar boom.”
Dec 7, 2019	Knowable Magazine. Quoted in “The tricky task of tallying carbon.”
Oct 10, 2019	Minnesota Daily. Quoted in “Institute on the Environment releases statewide strategic plan.”
Nov 21, 2019	Midwest Energy News. Quoted in “Minnesota ‘value of solar’ compromise likely to boost community solar payments.”
Sep 30, 2019	UMN Law School News. Quoted in “A Cross-Field Collaboration to Tackle Thorny Environmental and Energy Issues.”
Sep 17, 2019	WCCO (CBS Minnesota). Television interview for “What causes gas prices to rise?”
Sep 13, 2019	Inside Climate News: Clean Economy Weekly. Referenced in “Did Solar Power's Value Just Double in Minnesota?”
Sep 9, 2019	Midwest Energy News. Quoted in “Xcel Energy seeks changes as ‘value of solar’ rate spike looms in Minnesota.”
Feb 21, 2019	Minnesota Daily. Quoted in “UMN researchers incorporate solar panels in low-income housing” which summarizes our research.
Feb 7, 2019	Minnesota Daily. Quoted in “UMN researchers explore access to sustainable energy around Minnesota.”
Jan 25, 2019	Humphrey School News. Quoted in “Humphrey School's Gabe Chan Awarded McKnight Professorship to Support Research in Energy Policy.”
Jan 24, 2019	Minnesota Daily. Quoted in “UMN collaborates with Puerto Rico to explore sustainable energy.” Summarized and syndicated by the Associated Press and other outlets.
Dec 27, 2018	Star Tribune. Quoted in “Complicated economics of community solar gardens subject of debate.”
Dec 27, 2018	Star Tribune. Quoted in “Minnesota set to see second consecutive year of strong solar energy growth.”
Dec 19, 2018	MPR News. Climate Cast. Radio interview for “How Xcel could bring carbon-free power to Minnesota.”
Dec 5, 2018	Minnesota Daily. Quoted in “UMN student, professor combine efforts on environmental advocacy.”
Nov 12, 2018	WCCO (CBS Minnesota). Quoted in “How Does Minnesota’s Gas Tax Compare To Other States?”
Nov 8, 2018	Minnesota Daily. Quoted in “University changes course on energy efficiency program”
Oct 12, 2018	Brainerd Dispatch. Featured in “Humphrey School students and RREAL team up for ‘Solar for Humanity’”
Oct 9, 2018	WCCO (CBS Minnesota). Television interview for “What are the top ways emissions are produced?”
Apr 3, 2018	WCCO (CBS Minnesota). Television interview for “What are the fuel emission standards for our cars?”
Mar 7, 2018	MPR News. Live radio interview on “Renewables now the number two source of power generation in Minnesota”

Feb 1, 2018	MPR News: Climate Cast. Radio interview for “Solar energy is booming. Why a tariff now?”
Jan 26, 2018	MinnPost. Quoted in “Solar flare-up: new Trump tariffs inject 10,000 watts of uncertainty into one of Minnesota’s fastest growing industries”
Jan 25, 2018	MPR News. Live radio interview for “Is renewable energy hurt or helped by high tariffs?”
Jan 2, 2018	Greentech Media. Research project profiled in “The National Playbook for Creating an Energy Innovation Powerhouse.”
Dec 6, 2017	Minnesota Daily. Quoted in “Researchers link acceptance of climate change to group identity”
Dec 5, 2017	Humphrey School News. Quoted in “Humphrey School Students Get Up-Close Look at UN Climate Talks.”
Jun 8, 2017	Minnesota Daily. Quoted in “UMN faculty to Trump: Leaving Paris Agreement will impact U.S.”
Mar 28, 2017	MPR News. Quoted in “Economics, not EPA, drive down power plant emissions in Minnesota”
Feb 15, 2017	Humphrey School News. Research project profiled in “Humphrey School's Gabe Chan: More Collaboration Needed to Address Climate Change.”
Dec 16, 2016	MinnPost. Quoted in “Clean Power Plan B: Why Minnesota will be a climate leader in Trump's America”
Aug 5, 2016	Inside Climate News. Quoted in “Do IPCC Reports Communicate Effectively”

PUBLIC AND PRACTITIONER PRESENTATIONS AND WORKSHOPS

Nov 15, 2021	Minnesota Department of Commerce: Solar*Rewards Community Working Group. “Value of Solar’s Avoided Distribution Capacity: Proposal for a Framework.”
Oct 26, 2021	National Renewable Energy Lab. Speaker at the NREL public webinar. “Sharing the Sun: Community Solar Data and Cost.”
Oct 20, 2021	Minnesota State Bar Association, Public Utilities Section on “Equitable Solar Tariffs.”
Oct-Nov, 2021	University of Minnesota, Institute on the Environment and Robert J. Jones Urban Research and Outreach-Engagement Center. Workshop Coordinator for “Energy and Equity in the Twin Cities”
Oct 19, 2021	Minnesota Solar Energy Industry Association: Gateway to Solar. “Residential Adders to the Value of Solar.”
Aug 3, 2021	East River Electric. Speaker to the Board of Directors. “Equitable Solar Deployment with Electric Cooperatives.”
Aug 17, 2021	Minnesota Rural Electric Association: Energy Issues Summit. “Preparing for the Energy Consumer of the Future” with Teri Viswanath (CoBank).
May 20, 2021	Minnesota Renewable Energy Society on “Equitable Community Solar.”
Apr 23, 2021	Minnesota State Bar Association, Public Utilities Section and Mitchell Hamline School of Law. Panelist on “Integrated Resource Planning: Enhancing Distributive Justice within the Energy Transition”
Apr 12, 2021	Minnesota Department of Commerce: Solar Minnesota on “Equitable Community Solar in Minnesota: Assembling, Operating, and Enacting Equitable Community Solar.”
Mar 8, 2021	U.S. Department of Energy: Solar Energy Innovation Network. “Equitable Solar Deployment with Electric Cooperatives” and “Distributing Costs and Benefits from Rural Solar Deployment.”
Feb 25, 2021	Dakota Electric Association. Speaker to the Board of Directors. “Cooperatives Navigating the Energy Transition: Opportunities and Challenges for Distribution Utilities”
Feb 24, 2021	National Renewable Electric Cooperative Association: PowerXchange. “Cooperatives Navigating the Energy Transition.”

- Dec 1, 2020 Minnesota Community Action Partnership Board of Directors. “Understanding How Community Action Partnerships Implement Energy Assistance” (with Bhavin Pradhan).
- Nov 10, 2020 Regional Sustainable Development Partnerships: Statewide Coordinating Committee. “Energy Justice.”
- Oct 23, 2020 University of Minnesota West Bank Energy & Environment Collaborative. Introductory speaker at “Equity and Electrification of Transportation in Minnesota.”
- Oct 21, 2020 Minnesota State Bar Association, Public Utilities Section. “Cooperative Clean Energy” (with Alex Klass).
- Sep 4, 2020 Minnesota State Bar Association: 2020 Minnesota Environmental Institute. “Energy Transitions Under Trump: A Law and Policy Perspective” (with Alex Klass).
- Jun 23, 2020 Minnesota Center for Environmental Advocacy: Minnesota Public Utilities Commission Roundtable. “Updates on Minnesota’s Value of Solar.”
- Jun 4, 2020 East River Electric. Speaker to the Board of Directors monthly meeting. “Organizational Innovation for Equitable Solar Deployment with Electric Cooperatives.”
- May 21, 2020 National Renewable Energy Lab. Speaker at the NREL public webinar. “Sharing the Sun: Understanding Community Solar Deployment and Subscriptions.”
- May 5, 2020 Illinois Commerce Commission. Speaker on a webinar invited by the Environmental Law and Policy Center, Vote Solar, GridLab on “Determining the Value of Distributed Energy Resources in Illinois.”
- Feb 21, 2020 2nd Workshop on Trajectories of Change for Scaling Up Community Solar in Texas. Workshop Co-Convener at Mitchell Foundation.
- Jan 29, 2020 Minnesota Department of Commerce. Speaker at MN PUC-directed workshop on “Value of Solar’s Avoided Distribution Capacity: New York’s Experience”
- Dec 11, 2019 Environmental Initiative. Speaker at “Electrification: Who Benefits?”
- Nov 15, 2019 Solar Energy Industries Association and Smart Electric Power Alliance: Solar and Energy Storage Midwest on “How to Expand Community Solar in the Midwest”
- Nov 11, 2019 1st Workshop on Trajectories of Change for Scaling Up Community Solar in Texas. Workshop Co-Convener at UT-Austin.
- Oct 22, 2019 Association of Professional Schools of International Affairs: Public and International Service Advisor Network (PISA) training on “Strategies for Engaging Students in International Affairs”
- Oct 15, 2019 University of Minnesota Law School on “The Legal and Scientific Case for Recovering Climate Change Damages in Minnesota from Fossil Fuel Companies”
- Oct 3, 2019 University of Minnesota (Social Concerns Committee) Climate Solutions: Carbon Pricing and Policy on “Innovation: Climate Savior or Climate Distraction”
- Jul 9-10, 2019 Coalition for Community Solar Access: Community Solar Summit on “Opening Session & Breakfast: Achieving Community Solar at Scale” and “Market Roundup: The Early Birds - Colorado and Minnesota”
- Jun 14, 2019 University of Minnesota (Institute on the Environment) Minnesota’s Clean Energy Future Series on “Around the World in 70 Minutes”
- May 16, 2019 U.S. Department of Energy, Solar Energy Technology Office: SETO Community Solar Workshop on “The Value of Solar Tariff: Experience from Minnesota’s Solar*Rewards Community Program”
- May 7, 2019 Theater of Public Policy and Community Power. Panelist on “Preparing for a Climate Crossroads”
- Apr 8, 2019 Minnesota Department of Commerce: Solar Minnesota. Speaker on “Barriers and Opportunities for Distributed Energy Resources in Minnesota’s Municipal Utilities and Electric Cooperatives” (with Matthew Grimley)

Mar 7, 2019	University of Minnesota (co-convener), Clean Energy Resource Teams, and Great Plains Institute. “Dialogue on Distributed Energy Resources w/ Cooperative & Municipal Utilities”
Jan 29, 2019	Third Way. Briefing on “An Analytical Approach to Improving Public Energy R&D Investment Decisions” (with Laura Diaz Anadon).
Oct 5, 2018	Rural Renewable Energy Alliance. Presentation at organization headquarters on “Incorporating Solar in Habitat for Humanity Households: Study Design and Preliminary Findings.”
Sep 6, 2018	Minnesota Rural Electric Association CEO’s Meeting. Speaker on “The Challenges and Opportunities of Distributed Energy Resources for Municipal Utilities and Electric Cooperatives.”
Apr 3, 2018	Carlson School of Management: 2018 Energy Conference on “The Role of Business in the Energy Transition.”
Jun 15, 2017	Environmental Initiative. Speaker at “Policy Forum Series: The Changing Federal-State Relationship & Minnesota’s Environment.”
Feb 1, 2017	University of Minnesota College of Biological Science: The Petri Dish. Panelist at “Where do we go from here? The science, policy and politics of addressing and adapting to global-scale environmental change.”
Jan 17, 2017	Minnesota State Bar Association. Presenter at “Environmental and Energy Law and Policy Under a Trump Administration.”
Jan 10, 2017	Kinect Energy Group. Presenter on Monthly Webinar “What to Expect for Environmental Regulation in a Trump Administration.”
Jan 14, 2015	U.S. Department of Energy Office of Energy Efficiency and Renewable Energy. Invited seminar on “The Commercialization of Publicly Funded Science: How Licensing Federal Laboratory Inventions Affects the Rate of Knowledge Spillovers.”
Aug 22, 2014	Lawrence Berkeley National Laboratory. Invited seminar on “Evaluating Patent Licensing Agreements for Technology Diffusion at the U.S. National Labs.”
Jul 29, 2010	National Renewable Energy Laboratory. Invited seminar on “Expert Elicitation of Cost, Performance, and RD&D Budgets for Greenhouse Gas Reducing Strategies: Fossil Power with CCS (with discussion of advanced vehicles).”
May 7, 2010	U.S. Department of Energy. Invited seminar on “EMF-22 and Updated ‘Waterfall’ Chart.”

GRADUATE THESIS COMMITTEES

in progress	Colgan, Kimberly. TBD. Ph.D. in Bioproducts and Biosystems Engineering. <i>Committee Member</i>
	Mayer, Terin. TBD. Ph.D. in Public Affairs. <i>Committee Member</i>
	Pradhan, Bhavin. TBD. Ph.D. in Public Affairs. <i>Committee Chair</i>
	Hansen, Stu. “Enabling the Energy Transition Through Improved Data Collection, Collaboration and Planning.” M.S. Management of Technology. <i>Advisor.</i>
2021	Domingo, Nina. “Air-Quality Related Health Impacts of Food in the United States.” Ph.D. in Bioproducts and Biosystems Engineering. <i>Committee Member</i>
	Anand, Sarayu. “Economic Overview of the Fisheries in the Asia-Pacific Region.” MS-STEP. <i>Committee Member.</i>
2020	Allen, Nia. “Technologies to Solve the Orbital Debris Problem and its Effects on the Future of Space Exploration.” M.S. Aerospace Engineering and Mechanics. <i>Committee Member</i>
	Dampha, Nfamara. “Socio-economic & Ecosystem Service Assessment of Climate Change Impacts in a Developing Island Capital City, Banjul The Gambia.” Ph.D. in Applied Economics. <i>Committee Member.</i>

- Dellwo, Kristy. “Bridging the Gap Between Traditional Agro-Business Sustainability Programs and the Urgency for Science-based Targets: A Case Study for CHS Inc.” MS-STEP. *Committee Chair*.
- Ernt, Lauren. “Oil Pipelines, Climate Change, and Frames: Local News Coverage of the Enbridge Line 3 Pipeline Replacement Project in Northern Minnesota.” M.A. in the Hubbard School of Journalism and Mass Communication. *Committee Member*
- Ingulsrud, Alex. “Solar Development of Farmland in Minnesota: Mapping Scenarios Based on Ten Metrics at the Nexus of Solar and Agriculture.” MPP. *Committee Member*.
- O’Malley, Jane. “Comparative Analysis of CCS Development Across Five Nations.” MS-STEP. *Committee Chair*.
- Reinert, Jacob. “Plastics, Climate, and Regulatory Capture through Voluntary Environmental Programs.” MS-STEP. *Committee Chair*.
- Simons, Siri. “On the Road to Climate Action: Analyzing Municipal Approaches to Plan Implementation to Reduce Transportation Sector Greenhouse Gas Emissions.” MURP, Thesis. *Committee Member*.
- 2019 Arnold, Elizabeth. “Shalefield Secrets: Use of Nondisclosure Agreements by Gas Operators in Pennsylvania.” MS-STEP. *Committee Chair*.
- Fang, Andrew. “Carbon, Air Pollution, and Health (CAH) Co-Benefits at the urban scale: Planning documents, coupled modeling and uncertainty.” Ph.D. in Public Policy. *Committee Member*.
- Forsberg, Lindsey. “Market Rules in Transition: Energy Storage and the U.S. Electricity Grid.” MS-STEP, Thesis. *Committee Chair*.
- Grimley, Matt. “‘Cooperative is an Oxymoron!’: The History of How 4 Electric Cooperatives Created Load Management in Minnesota.” MS-STEP, Thesis. *Committee Chair*.
- Kelbrants, Ryan. “Advancing Sustainable Management Practices to Responsibly Produce Corn to Feed and Power the World.” M.L.S. *Committee Member*.
- Kirby, Eileen. “Climate Change and Disaster Response: Informing frameworks for analyzing evacuation planning and policy effectiveness through a comparative review of wildfire and hurricane evacuation studies.” *Committee Member*.
- Martin, Ben. “Effects of Ground-Mounted Solar Installations on Values of Abutting Residential Properties.” MPP. *Committee Chair*.
- Venning, Alex. “Behind-the-Meter Battery Energy Storage in Minnesota: Assessment of Value, Challenges, and Policy Opportunities.” MS-STEP. *Committee Chair*.
- 2018 Sun, Bixuan. “Strategic Interactions in the Transition to Clean Energy.” Ph.D. in Applied Economics. *Committee Member*.
- Hillstrom, Alexandra. “Incorporating ‘sustainability’ in Inver Grove Heights Fleet Management.” MS-STEP. *Committee Chair*.
- Kosse, Rachel. “Will Doubling Urban Agriculture in the Twin Cities Improve Self-Reliance?” MS-STEP. *Committee Member*.
- 2017 Chowdhury, Ashfaul. “Additionality requirement in CDM carbon offset projects: Lessons for moving forward.” MPP. *Committee Chair*.
- Cronk, Sarah. “The place for corporate strategy in the regulated electric industry: Case study of Xcel Energy Inc. regulatory filings.” MPP. *Committee Chair*.
- Gurke, Kate. “Impacts of Scale on Food Waste Technologies: An Analysis of Three Technology Options for the City of Minneapolis.” MS-STEP. *Committee Chair*.
- Hanson, Aaron. “Market and Policy Landscape for Energy Efficient Homes.” MS-STEP. *Committee Chair*.

Plouff, Abbie. "Reimagining the Iron Range Resource Economy: Lessons from Appalachia on Economic Diversification in a Post-Mining." MPP. *Committee Chair*.

Rook, Jill. "Successful International Cooperative R&D: An Institutional Analysis to Enhance Innovation in Clean Energy Technologies." MS-STEP. *Committee Chair*.

Santhanam, Sukumar. "Equitable Loss Allocation in Distribution Systems." MS in Electrical Engineering. *Committee Member*.

Sharma, Rahul. "Boundary Organizations in Practice: Neighborhood-scale Organic Waste Management in Linden Hills, Minneapolis." MPP. *Committee Co-Chair*.

Terwilliger, Hanna. "Distributed Small Scale Solar Growth in Minnesota." MPP. *Committee Chair*.

2016 Beets, Rebecca. "Governing CRISPR: Evaluating Ethics, Risk, and Regulation in Gene Drive Research." MS-STEP. *Committee Member*.

Hemmingsen-Jaeger, Amanda. "Direct-to-consumer genetic testing: Where we are and where we could be." MS-STEP. *Committee Member*.

Gurung, Tashi. "Climate Change Adaptation policies in Himalayan Region of Nepal. Comparative analysis of INDCs between Nepal, India, and Peru." MS-STEP. *Committee Member*.

PROFESSIONAL ORGANIZATIONS

Association of Public Policy Analysis and Management

OTHER SERVICE

Educational Councilor for M.I.T. (2016 - 2019)

PERSONAL INFORMATION

Date of birth: 8/3/1987, Sex: Male, Citizenship: U.S., Legal name: Gabriel Angelo Sherak Au-Chan