

# Danae Hernandez-Cortes

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## CONTACT INFORMATION

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## ACADEMIC APPOINTMENTS

2021- **Assistant Professor**, College of Global Futures, Arizona State University  
School for the Future of Innovation in Society (50%)  
School of Sustainability (50%)  
2021- **Research Affiliate**, emLab, UCSB

## EDUCATION

2021 **Ph.D. in Economics**, University of California, Santa Barbara.  
Environmental Science Emphasis at the Bren School of Environment, UCSB.  
Dissertation: “Essays on the Distributional Effects of Environmental Policy”  
2017 **M.A., Economics**, University of California, Santa Barbara.  
2015 **B.A., Economics**, Centro de Investigación y Docencia Económicas (CIDE), Mexico City.  
2014 **Visiting Student**, University of Gothenburg, Sweden.

## PUBLICATIONS

Deshmukh, R., Weber, P., Deschenes, O., **Hernandez-Cortes, D.**, Kordell, T., Mallow, C., Magin, T., Meng, M., Sum, S., Thivierge, V., Uppal, A., Lea, D., & Meng, K. Well setbacks limit California’s oil supply with larger health benefits and employment losses than excise and carbon taxes. *Nature Energy*. Policy Brief, June 2023.

**Hernandez-Cortes, D.** & Meng, K. (2023). Do health disparities narrow with pollution disparities? Evidence from California *AEA Papers and Proceedings*, 113 : 372-76.

Deshmukh, R., Weber, P., Deschenes, O., **Hernandez-Cortes, D.**, Kordell, T., Mallow, C., Magin, T., Meng, M., Sum, S., Thivierge, V., Uppal, A. & Meng, K. Equitable low-carbon transition pathways for California’s oil extraction. *Nature Energy*, May 2023.

Li, R., Chester, M., Middel, A., Vanos, J., **Hernandez-Cortes, D.**, Buo, I., & Hondula, D. (2023). Effectiveness of travel behavior and infrastructure change to mitigate heat exposure. *Frontiers in Sustainable Cities*, 5, 1129388.

**Hernandez-Cortes, D.** & Meng, K. (2023). Do Environmental Markets Cause Environmental Injustice? Evidence from California’s Carbon Market. *Journal of Public Economics*, 217, 104786.

**Hernandez-Cortes, D.**, Meng, K. & Weber, P. (2022). Decomposing Trends in Air Pollution Disparities from U.S. Electricity. *Environmental and Energy Policy and the Economy* Vol. 4.

**Hernandez-Cortes, D.** & Lopez-Rosas, E. (2022). The Environmental Justice Dimension of the Mexican Emissions Trading System. In Lucatello, S (editor). *Towards an Emissions Trading System in Mexico: Rationale, Design and Connections with the Global Climate Agenda Outlook on the first ETS in Latin-America and Exploration of the Way Forward* (Chapter 12), Springer Climate, ISSN: 2352-0698

Gračner T, Marquez-Padilla F & **Hernandez-Cortes, D.** (2022) Changes in Weight-Related Outcomes Among Adolescents Following Consumer Price Increases of Taxed Sugar-Sweetened Beverages. *JAMA Pediatrics*, 176(2), 150-158.

Arceo-Gómez, E., **Hernandez-Cortes, D.** & López-Feldman, A. (2020) Droughts and rural households' wellbeing: evidence from Mexico. *Climatic Change*. Vol. 162., pp. 1197-1212.

Chakraborti, L., Heres, D. & **Hernandez-Cortes, D.** (2019) Are Land Values Related to Ambient Air Pollution Levels? Hedonic Evidence from Mexico City. *Environment and Development Economics*. Vol. 24, Issue 3, pp. 252-270.

Aburto-Oropeza, O., Johnson, A. F., Agha, M., Allen, E. B., Allen, M. F., González, J. A., ... **Hernandez-Cortes, D.**, ... & Taylor, J. E. (2018) Harnessing cross-border resources to confront climate change. *Environmental Science & Policy*, Vol. 87, pp. 128-132.

López-Feldman, A. & **Hernandez-Cortes, D.** (2016) "Cambio Climático y Agricultura: Una Revisión de la Literatura con Énfasis en América Latina" [*Climate Change and Agriculture: A Literature Review for Latin America*] *El Trimestre Económico*, 332:459-496.

## WORKING PAPERS

"Recent Findings and Methodologies in Economics Research in Environmental Justice" with Lucas Cain, Chris Timmins, and Paige Weber. Accepted, *Review of Environmental Economics and Policy*.

"Water, Dust, and Environmental Justice: The Case of Agricultural Water Diversions" with Ryan Abman and Eric Edwards. Conditionally Accepted, *American Journal of Agricultural Economics*.

"The Distributional Consequences of Incomplete Regulation". Revise and Resubmit, *Journal of the Association of Environmental and Resource Economists*.

"The Effects of Renewable Energy Projects on Employment: Evidence from Brazil" with Sophie Mathes. Revise and Resubmit, *Journal of the Association of Environmental and Resource Economists*.

"Community engaged research for the clean energy transition", with Beia Spiller, Neha Khanna and Mehri Mohebbi. Revise and Resubmit, *Review of Environmental Economics and Policy*.

## SELECTED WORK IN PROGRESS

"Vehicles, Travel Demand, and Income: Responses to Subways and Bus Rapid Transit in Mexico City" with Christopher Severen and Paulina Oliva

"The Effects of Natural Disasters on Labor Allocation: Evidence from Brazil" with Sophie Mathes

## BOOK CHAPTERS AND POLICY REPORTS

"Enhancing equity while eliminating emissions in California's supply of transportation fuels" with emLab Carbon Neutrality project team.

"Carbon Neutrality and California's Transportation Fossil Fuel Supply" with emLab Carbon Neutrality project team.

"Mexican Rural Households' Vulnerability and Adaptation to Climate Change" with Alejandro López-Feldman, Antonio Yúnez-Naude, J. Edward Taylor and Alan Hernández. White Paper for the Environmental Working Group of the UC-Mexico Initiative. August 11, 2017.

"The link between clean air policy and climate change policy in Mexico: Building an agenda for evaluation and research" with Paulina Oliva, Marco Heredia, Victor H. Paramo, Teresita Romero, Jose A. Ortinez, Giovanna Montagner, and Karla J. Lopez. White Paper for the Environmental Working Group of the UC-Mexico Initiative. October 23, 2017.

"MRV Blueprint for Road Freight Transport NAMA in Mexico" with Georg Schmid and Miriam Frisch. MRV Blueprint, German Ministry for the Environment, Nature Conservation and Nuclear Safety. 2015.

## PRESENTATIONS AND INVITED TALKS

**2024 (includes scheduled):** AEA/ASSA Annual Meetings, San Diego State University.

**2023:** AEA/ASSA Annual Meetings, UC Berkeley Energy and Resources Group, University of Utah, Princeton C-PREE, CU Boulder, Cornell, California Air Resources Group, AERE 2023 Summer Conference, California Independent Emissions Market Advisory Committee, PUC Chile, OSWEET, FGV Sao Paulo, Virginia Tech, University of New Mexico.

**2022:** SBCA, AERE MEAs, CAF-Banco de Desarrollo de América Latina, University of Chicago (EPIC), Occasional Workshop in Environmental and Resource Economics (discussant), Institute for Policy Integrity's Advancing Energy Justice: Tools for Justice40 and Equitable Deep Decarbonization (panelist), NBER EEPE, AERE 2022 Summer Conference, Federal Housing Finance Agency, CU Boulder Environmental and Natural Resource Economics Workshop, UW Madison, Columbia SIPA, UCSB Bren School seminar, AERE Environmental Justice Fall Workshop.

**2021:** 2021 ASSA Virtual Meeting (discussant), University of Illinois Urbana Champaign (pERE Seminar), UCSB Grad Slam Competition, Microsoft Research Seminar, ASU College of Global Futures, UCSB Pacific Views Public Lecture, ZEW, University of Oregon, OSWEET, AERE 2021 Summer Conference, EMEE Summer Workshop, Banco de Mexico, Irving Institute New Energy Series, LACEA 2021, ASU Enlightening Lunch, UCSD, North Carolina State, Rutgers.

**2020:** UC Berkeley Climate Economics Workshop, UCSB Labor Lunch, IETA Webinar, Bren Environmental Justice Symposium, AERE 2020 Summer Conference, NBER Summer Institute (egg-timer), Montana State University, 2020 Virtual UEA, Claremont McKenna College, SOCAE, CIDE, RIDGE Environmental Economics Workshop.

**2019:** TWEEDS, EAERE Summer School, UCLA-Institute of the Environment & Sustainability, Occasional Workshop in Environmental and Resource Economics (egg-timer).

**2018:** Resources for the Future's research seminar, UCSB Environmental Lunch Series.

**2016:** Third Annual Congress of Economics and Public Policy at IBERO.

## GRANTS AND FELLOWSHIPS

### As Principal Investigator:

**Hernandez-Cortes, D.**, Aguiar-Hernandez, C., Chester, M. & Vannos, J. (2024). *Navigating Heat and Air Pollution Exposure Tradeoffs under City Decarbonization Plans in Phoenix*. Sponsor: ASU Knowledge Exchange for Resilience. Award: \$35,000.

**Hernandez-Cortes, D.**, Sheriff, G. & Parker, N. (2023-2026). *Environmental Justice Implications of Public Transit Electrification and Changing Generation Portfolios in Arizona*. Sponsor: EPA. Award: \$649,998.

**Hernandez-Cortes, D.** (2022-2023). *How do we create an air quality monitoring network that provides air quality information of all communities in the Phoenix Metropolitan Area?*. Sponsor: ASU Knowledge Exchange for Resilience Fellowship. Award: \$15,000.

### As Co-Principal Investigator:

Sheriff, G., **Hernandez-Cortes, D.** & Jhen, M. (2023-2024). *Do equity improvements in exposure to environmental stressors translate to equity improvements in health outcomes for overburdened communities?*. Sponsor: National Science Foundation. Award: \$74,999.

**Hernandez-Cortes, D.** & Mathes, S. (2023). *The Effects of Renewable Energy Projects on Employment: Evidence from Brazil*. Sponsor: CAF Development Bank. Award: \$5,000.

Keeler, L., Miller, C., **Hernandez-Cortes, D.** & Bednar, D. (2022-2023). *SRP: Defining and Strategizing Equity*. Sponsor: Salt River Project. Award: \$250,000.

Jalbert, K., **Hernandez-Cortes, D.** & Kuznetsov, S. (2022-2023). *SAI-P: Designing Just Futures for Public Engagement in Petrochemical Pipeline Infrastructure*. Sponsor: National Science Foundation. Award: \$149,349.

Parker, N., **Hernandez-Cortes, D.** & Breetz, H. (2022-2023). *How Does Electric Vehicle Adoption Affect Air Quality for Low-Income Households?* Sponsor: ASU Healthy Urban Environments Initiative. Award: \$49,200.

## OTHER GRANTS AND AWARDS

Winter 2021 UCSB Grad Slam Finalist and Winner of People's Choice Award.  
Spring 2020 Economics UCSB Outstanding Undergraduate Course Teaching Assistant Award.  
Spring 2019 UCSB Economics Research Quarter Competition.  
Spring 2019 UCSB Economics Travel Grant.  
Fall 2018 UCSB Economics Data Purchase Grant.  
Spring 2016 UC MEXUS-CONACYT Doctoral Fellowship 2016-2021.  
Spring 2014 Grant for visiting students by the Grants Committee of the Philosophical Faculties, Gothenburg, Sweden.

## REFEREE

**Journals:** *AEJ: Applied*, *American Journal of Agricultural Economics*, *Empirical Economics*, *Energy Economics*, *Environment and Development Economics*, *Journal of Policy Analysis and Management*, *Journal of the Association of Environmental and Resource Economists*, *Journal of Environmental Economics and Management*, *Journal of the European Economic Association*, *Journal of Open Source Education*, *Nature Climate Change*, *Oxford Development Studies*, *PLoS Climate*, *Science Advances*, *SAGE Open*.

**Grants:** *Alfred P. Sloan Foundation*, *National Science Foundation*, *European Research Council*.

## ASU SERVICE

2023- Co-organizer of the research seminar for the Center for Environmental Economics and Sustainability Policy, ASU.  
2021- Justice, Equity, Diversity and Inclusion Committee, School of Sustainability, ASU.  
2021- IGD Graduate Committee, School for the Future of Innovation in Society, ASU.

## OTHER PROFESSIONAL ACTIVITIES

2023- Member of the EDF Economics Advisory Council  
2023 Co-organizer of NBER Conference "Distributional Impacts of Climate Change in the Agricultural Sector"  
2022- AERE Wallace E. Oates Outstanding Doctoral Dissertation Award selection committee.  
2022 AERE Environmental Justice Workshop organizing committee.  
2020- Board member of the Latin American Association of Environmental and Resource Economists (LAERE)  
2021 Undergraduate Honor's Thesis Advisor, UCSB.  
2019-2020 Co-chair of WeSB, *We Are Economics at Santa Barbara*: Group aimed at promoting diversity in the Economics Department at UCSB.  
2019 Undergraduate and Master's Thesis Committee Member, CIDE, Mexico City.

## TEACHING

Instructor for GTD 505: Social Science Inquiry for Global Development, ASU (Fall 2022, Fall 2023).

Instructor for SOS 574: Sustainable Energy Analytics, ASU (Spring 2022, Spring 2023, Spring 2024).

Teaching Assistant, Economics Department, UCSB.

Winter 2021 Environmental Economics (Prof. Kyle Meng).  
Spring 2020 Environmental Economics (Prof. Antony Millner).  
Winter 2018 Probability and Statistics 109: Statistics for Economics (Prof. Michael Nava).  
Fall 2017 Economics 9: Introduction to Economics (Prof. Cindy Benelli).

Teaching Assistant, Economics Department, CIDE, Mexico City.

Spring 2016    Microeconomics I for Ph.D. students (Prof. Luciana Moscoso).  
Fall 2015      Econometrics III: Microeconometrics (Prof. Florian Chavez-Juarez).  
Fall 2014      Introduction to Economics (Prof. Eva O. Arceo-Gómez).

## **RESEARCH POSITIONS**

2017-2021      Graduate Student Researcher, Environmental Market Solutions Lab (emLab), UCSB.  
Fall 2019      Research Assistant for Kelsey Jack, UCSB.  
Summer 2018   Research Intern for Margaret Walls, Resources for the Future, Washington, D.C.  
Summer 2016   Research Assistant for Paulina Oliva, UC-Mexus Initiative.  
2014-2016      Research Assistant for Alejandro Lopez-Feldman and David Heres, CIDE, Mexico City.

## **LANGUAGE SKILLS**

English (fluent), Spanish (native) and Swedish (basic).