

# CURRICULUM VITAE

Elisheba (Beia) Spiller

## CONTACT INFO

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## EDUCATION

Ph.D. in Economics, Duke University, Durham, NC, USA, May 2011

M.A. in Economics, Duke University, May 2008

M.A. in Public Policy, Universidad Torcuato di Tella, Buenos Aires, Argentina, December 2005

B.A. in Environmental Policy, University of California, San Diego, La Jolla, CA, USA June 2003

## PROFESSIONAL EXPERIENCE

*May 2022- Present*

Resources for the Future, Washington DC

-Transportation Program Director, Fellow

*January 2022- December 2024*

Board member and Chair of Diversity, Equity and Inclusion Committee, Association for Environmental and Resource Economists

*January 2013 – April 2022*

Environmental Defense Fund, New York NY

-Lead Senior Economist

-Editor, EDF Economics Discussion Paper Series

*June 2011- December 2012*

Resources for the Future, Washington DC

-Post-Doctoral Fellow

*2008- 2010*

Department of Economics, Duke University, Durham, NC

- Research Assistant for Christopher Timmins

- Teaching Assistant

- Writing and Composition Instructor

*2006*

CIPPEC (Centro de Implementación de Políticas Públicas para la Equidad y el Crecimiento), Buenos Aires, Argentina

-Executive Director Assistant

*2003*

Buenos Aires Municipality, Environmental Secretary, Buenos Aires, Argentina

- Environmental Program Coordinator

*2002-2003*

Natural Reserve System, UC San Diego, La Jolla, CA

- Natural Reserve Management Planner

*2001*

Scripps Institute of Oceanography, UC San Diego, La Jolla, CA

- Research Assistant for Karen Stocks

## PUBLICATIONS

1. “Geotechnical, economic, social, and environmental dimensions of direct lithium extraction (DLE) from Smackover brines in Arkansas”. 2026. With Aaron Malone, Alannah Brett, Linda Battalora, Elizabeth Holley, Frances Fitzgerald, Caroline Ruppert, Andres Reyes and Julia Jan. *Environmental Research Energy*, 3, 015013.
2. “Can Emerging Industrial Technologies Compete? Scoping the Market Viability of Direct Lithium Extraction in the United States.” 2025. With Frances Fitzgerald. *Resources for the Future Report* 25-16.
3. “A Tale of Two Investments: Charging Stations and Purchase Subsidies for EV Adoption.” 2025. With Yanjun Liao and Bei Lou. *Transportation Research Part A: Policy and Practice* 202: 104703.
4. “A Retrospective Analysis of Heavy-Duty Vehicle Tailpipe Nitrogen Oxides Emissions Standards.” 2025. With Nafisa Lohawala, Joshua Linn, Lucie Bioret, Emma DeAngeli, and Nicholas Roy. *Transportation Research Part D: Transport and the Environment* 149: 105065.
5. “The Strategic Game of Rare Earths: Why China May Only be in Favor of Temporary Export Restrictions” 2025. with H el ene Nguemgaing, Sangita Kannan and Michael Toman. *Resources for the Future Issue Brief*.
6. “Corporate Due Diligence, Auto Industry, and Battery Supply Chains” 2025. With Vaios Triantafyllou and Anthony Cheng. *Resources for the Future Report* 25-15.
7. “Community-Engaged Economics Research for the Clean Energy Transition”, 2025. with Danae Hernandez-Cortes, Neha Khanna and Mehri Mohebbi. *Review of Environmental Economics and Policy* 19:2.
8. “Import Tariffs and the Market for Vehicles”, 2025. With Joshua Linn. *Resources for the Future Report* 25-10.
9. “The Health Benefits of Solar Power Generation: Evidence from Chile”, with Nathaly M. Rivera and Cristobal Ruiz-Tagle. 2024. *Journal of Environmental Economics and Management* 126: 102999.
10. “Exploring Hydrogen's Role in Heavy-Duty Trucking”, with Katarina Nehrkorn and Alan Krupnick. July 2024. *Resources for the Future Report* 24-11.
11. “Policy Challenges for Accessing Critical Minerals to Electrify Vehicle Transport”, with Sangita Kannan and Mike Toman. December 2023. *Resources for the Future Report* 23-19.
12. “From Diesel to Electric: Overcoming Grid Integration Challenges in the Medium-and Heavy-Duty Vehicle Sector”, with Nafisa Lohawala. 2023. *Economics of Energy & Environmental Policy* 12, no. 2.
13. “Final Summary Report: Zero-Emissions Vehicle (ZEV) Mandates Workshop”, with Nafisa Lohawala and Emma DeAngeli. July 2023. *Resources for the Future Report* 23-10.
14. “Medium- and Heavy-Duty Vehicle Electrification: Challenges, Policy Solutions, and Open Research Questions”, with Nafisa Lohawala and Emma DeAngeli. May 2023. *Resources for the Future Report* 23-03.
15. “The Role of Electricity Tariff Design in Distributed Energy Resource Deployment”, with Ricardo Esparza, Kristina Mohlin, Karen Tapia-Ahumada, and Bur cin  nel. *Energy Economics* 120 (2023): 106500.
16. “Mortality Risk from PM<sub>2.5</sub>: A Comparison of Modeling Approaches to Identify Disparities Across Ethnic Groups in Policy Outcomes”, with Nicholas Z. Muller, Jeremy Proville, and Ananya Roy. 2021. *Environmental Health Perspectives*, 129(12), 127004.

17. Bharatkumar, A., Esparza, R., Mohlin, K., Spiller, E., Tapia-Ahumada, K., & Unel, B. (2019). “Electricity Simulations on the Distribution Edge: Developing a Granular Representation of End-User Electric Load Preferences using Smart Meter Data”, In *Local Energy, Global Markets*, 42nd IAEE International Conference, May 29-June 1, 2019. International Association for Energy Economics.
18. Bilich, A., Spiller, E., & Fine, J. (2019). Proactively planning and operating energy storage for decarbonization: Recommendations for policymakers. *Energy Policy*, 132, 876-880.
19. Convery, F. J., Mohlin, K., & Spiller, E. (2017). Policy Brief—Designing Electric Utility Rates: Insights on Achieving Efficiency, Equity, and Environmental Goals. *Review of Environmental Economics and Policy*, 11(1), 156-164.
20. Spiller, E., Sopher, P., Martin, N., Mirzatury, M., & Zhang, X. (2017). The Environmental Impacts of Green Technologies in TX. *Energy Economics*, 68, 199-214.
21. Spiller, E., Stephens, H. M., & Chen, Y. (2017). Understanding the heterogeneous effects of gasoline taxes across income and location. *Resource and Energy Economics*, 50, 74-90.
22. Muehlenbachs, L., E. Spiller, and C. Timmins (2015), "The Housing Market Impacts of Shale Gas Development," *American Economic Review*, 105(12): 3633-59.
23. Spiller, E., H.M. Stephens, C. Timmins, and A. Smith (2013), “The Effect of Gasoline Taxes and Public Transit Investments on Driving Patterns”, *Environmental and Resource Economics*, doi:10.1007/s10640-013-9753-9.
24. Li, S., J. Linn and E. Spiller (2013). “Evaluating ‘Cash for Clunkers’: Program Effects on Auto Sales, Jobs and the Environment”, *Journal of Environmental Economics and Management*, 65(2): 175-193. <http://dx.doi.org/10.1016/j.jeem.2012.07.004>.

## SELECT WORKING PAPERS

1. “Impact of Electric Tariffs on Medium- and Heavy-Duty Vehicle Charging Costs and Loads”, with Ruolin Zhang, Elizabeth Stein, Eleftheria Kontou, and Alexander Yoshizumi. 2025. Available at: <https://www.rff.org/publications/working-papers/impact-of-electric-tariffs-on-medium-and-heavy-duty-vehicle-charging-costs-and-loads/>
2. “Community Engagement and Participatory Inclusion in Mining: Challenges, Barriers and Opportunities”, with Tinzar Hyun and Kriti Shah. 2025. Available at: <https://www.rff.org/publications/working-papers/community-engagement-and-participatory-inclusion-in-mining-challenges-barriers-and-opportunities/>
3. “Equity in Electric Vehicle Charging Stations”, with Suzanne Russo and Rachel Wilwerding. 2025. Available at: <https://www.rff.org/publications/working-papers/equity-in-electric-vehicle-charging-infrastructure/>
4. “The Cost of Species Protection: The Land Market Impacts of the Endangered Species Act”, with Eyal Frank, Maximillian Auffhammer, David McLaughlin, and David Sunding. 2025. Available at: <https://www.rff.org/publications/working-papers/the-cost-of-species-protection-the-land-market-impacts-of-the-endangered-species-act/>
5. “Retail Electricity Tariff Design, Distributed Energy Resources, and Emissions”, with Ricardo Esparza, Kristina Mohlin, Karen Tapia-Ahumada, and Burcin Unel. March 2021. Available at [https://policyintegrity.org/documents/Unel et al Retail Rate Design DERs and Emissions March 2021.pdf](https://policyintegrity.org/documents/Unel%20et%20al%20Retail%20Rate%20Design%20DERs%20and%20Emissions%20March%202021.pdf)

## **SELECT WORKS IN PROGRESS**

1. “What Enables Participatory Community Engagement? Expert Insights on Solutions”, with Tinzar Htu and Kriti Shah.
2. “Pricing and Market Dynamics of Public Electric Vehicle Charging Infrastructure”, with Ben Leard and Trenton Marable.
3. “Extracting Critical Minerals in the Deep Sea: Economic, Environmental, and Governance Tradeoffs”, with Gabriella Berman and Elizabeth Echevarria
4. “The Electric Vehicle Rebound Effect”, with Kenneth Gillingham and Marta Talevi.

## **FELLOWSHIPS AND GRANTS**

- Hewlett Foundation, Critical mineral supply chain resilience (\$175,000), 2026
- Hewlett Foundation, Creating effective critical minerals policies for a clean energy future (\$450,000), 2023
- Environmental Defense Fund, Hyperlocal air-quality monitoring to assess the causal effects of inequities in exposure to truck traffic pollution (\$200,000), 2022
- Alfred P. Sloan Foundation, Energy and Environment, Grant No-G- 2020-12661, 2020 (\$30,000)
- ITIF Energy Innovation Scholar, 2019
- Alfred P. Sloan Foundation, Energy and Environment, Grant No-G-2017-9829, 2017-2019 (\$589,260)
- Joseph L. Fisher Doctoral Dissertation Fellowship, Resources for the Future, 2010-2011
- Duke Endowment Fellowship, Duke University, 2006-2011

## **ORGANIZED WORKSHOPS AND WEBINARS**

“[Critical Minerals Research Lab Conference](#)”, June 26-27, 2025. Hosted by Resources for the Future.

“[Lessons in Mining Sustainability in Latin America](#)”, February 25, 2025. Hosted by Resources for the Future.

“[Critical Minerals, Critical Stakeholders: Engaging Local Communities in Mineral Resource Collaboration](#)”, June 6, 2024. Hosted by Resources for the Future.

“[Digging Deep: Critical Minerals, Electric Vehicles, and the Role of Innovation](#)”, March 12, 2024. Hosted by Resources for the Future.

“RFF Workshop on Critical Minerals”, July 12, 2023. Hosted by Resources for the Future. Virtual and closed-door event with stakeholders on issues around demand and supply for critical minerals for electric vehicle batteries.

“Zero Emissions Vehicle (ZEV) Mandates Workshop: Research for Effective, Efficient, and Equitable Policy Implementation”, June 12-13, 2023. Hosted by Resources for the Future.

- Summary report available [here](#).

Research and Policy Discussions in the Power Sector ([webinar series plus associated blogs](#))

- Funded by the Alfred P. Sloan Foundation
- Co-hosted with NYU School of Law Institute for Policy Integrity
- 1. “Energy Justice and the Just Transition in the Power Sector- New Research and Policy Opportunities”, October 26, 2021.
- 2. “Public Acceptance and Governance in Energy Policy”, December 16, 2021.
- 3. “Energy Market Design: New Research and Policy Approaches”, February 3, 2022.
- 4. “Distributed Energy Resources and Distribution Network Impacts”, March 4, 2022.
- 5. “Is the Price Right? Valuing and Compensating Distributed Energy Resources”, May 2022.

“Exploring Innovative Transportation Policies Workshop”, July 15-16, 2020. Co-hosted with Resources for the Future and Duke's Nicholas School.

“On The REV Agenda: The Role of Time Variant Pricing”, March 31, 2015. Co-hosted with NY Department of Public Service and NYU School of Law Institute for Policy Integrity.

## **LANGUAGES**

English (native), Spanish (native).

## **REGULATORY SUBMISSIONS AND GOVERNMENT COMMENTS**

B. Spiller, M. Toman, and M. Craig-Scheckman. “Comment on the Design of a Plurilateral Agreement on Trade in Critical Minerals and Policy Actions to Strengthen the Resilience of Critical Mineral Supply Chains”, March 19, 2026. Available for download [here](#).

B.Spiller, A. Cheng, M. Craig-Scheckman, F. Fitzgerald, H. Nguemgaing, and M. Toman. “Comment on the Department of Energy’s Request for Information on the 2026 Energy Critical Materials Assessment”, July 25, 2025. Available for download [here](#).

E. Stein and B. Spiller, “Comments to the New York State Public Service Commission on Addressing Barriers to Medium- and Heavy-Duty Electric Vehicle Charging Infrastructure”, June 5, 2023. Available for download [here](#).

B. Spiller. “Comments to EPA on the IRA’s Transportation Programs”, January 18, 2023. Available for download [here](#).

Toman, M. and B. Spiller. "Comments to Treasury on the IRA's Clean Vehicle Provisions", November 2022. Available for download [here](#).

Stein, E. and B. Spiller. "Comments of EDF In the Matter of the Value of Distributed Energy Resources, Case Number 15-E-0751", March 8, 2021. Available for download [here](#).

Spiller, E. "Direct Testimony of Elisheba Spiller on Behalf of Environmental Defense Fund, for the Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Case 20-E-0380 Niagara Mohawk Power Corporation", Nov 25, 2020. Available for download [here](#).

Union of Concerned Scientists et al (2020). "Petition for Reconsideration of EPA’s Final Rule—The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks", Docket No. EPA-HQ-OAR-2018-0283, June 29, 2020. Available for download [here](#).

Colbert, P.A. et al. “Coalition for Sustainable Distributed Clean Energy Comments on Rate Design Successor to Net Energy Metering for Mass Market Customers”, May 29, 2018. Available for download [here](#).

Spiller, B. and E.B. Stein. “Comments of Environmental Defense Fund on Matter 17-01276 (In the Matter of the Value of Distributed Energy Resources Working Group Regarding Value Stack), Matter 17-01277 (In the Matter of the Value of Distributed Energy Resources Working Group Regarding Rate Design)”, May 7, 2018. Available for download [here](#).

Spiller, B. “Direct Testimony of Elisheba Spiller for the Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations CASE 16-E-0060 7 of Consolidated Edison Company of New York, Inc. for Electric Service”, May 27, 2016. Available for download [here](#).

Tripp, J., E.B. Stein, R. Christian, and B. Spiller. “Comments of Environmental Defense Fund on Time-Sensitive Rate Pilot Plan”, November 6, 2014. Available for download [here](#).

Tripp, J., E.B. Stein, R. Christian, B. Spiller, J. Morris, and R. Salter. “Comments of Environmental Defense Fund and Natural Resources Defense Council on Petition of Consolidated Edison Company of New York, Inc. for Approval of Brooklyn/Queens Demand Management Program”, October 6, 2014. Available for download [here](#).

Union of Concerned Scientists et al (2020). "Petition for Reconsideration of EPA’s Final Rule—The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks", Docket No. EPA-HQ-OAR-2018-0283, June 29, 2020. Available for download [here](#).

Colbert, P.A. et al. “Coalition for Sustainable Distributed Clean Energy Comments on Rate Design Successor to Net Energy Metering for Mass Market Customers”, May 29, 2018. Available for download [here](#).

Spiller, B. and E.B. Stein. “Comments of Environmental Defense Fund on Matter 17-01276 (In the Matter of the Value of Distributed Energy Resources Working Group Regarding Value Stack), Matter 17-01277 (In the Matter of the Value of Distributed Energy Resources Working Group Regarding Rate Design)”, May 7, 2018. Available for download [here](#).

Spiller, B. “Direct Testimony of Elisheba Spiller for the Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations CASE 16-E-0060 7 of Consolidated Edison Company of New York, Inc. for Electric Service”, May 27, 2016. Available for download [here](#).

Tripp, J., E.B. Stein, R. Christian, and B. Spiller. “Comments of Environmental Defense Fund on Time-Sensitive Rate Pilot Plan”, November 6, 2014. Available for download [here](#).

Tripp, J., E.B. Stein, R. Christian, B. Spiller, J. Morris, and R. Salter. “Comments of Environmental Defense Fund and Natural Resources Defense Council on Petition of Consolidated Edison Company of New York, Inc. for Approval of Brooklyn/Queens Demand Management Program”, October 6, 2014. Available for download [here](#).