Email: e.dugoua@lse.ac.uk Website: eugeniedugoua.com Twitter: @eugeniedugoua

## **Appointment**

2018 – Assistant Professor in Environmental Economics

**London School of Economics** 

Department of Geography and Environment

### **Affiliations**

2024 –	Research Affiliate, CEPR (Centre for Economic Policy Research)
2023 –	Affiliate, CESifo Research Network (Center for Economic Studies and Ifo
	Institute for Economic Research)
2021 –	Associate, Center for Economic Performance, London School of Economics
2019 –	Associate, Grantham Research Institute on Climate Change and the
	Environment, London School of Economics
2019 –	Beijer Young Scholars programme, Beijer Institute of Ecological Economics,
	Royal Swedish Academy of Sciences
2018 –	Fellow, Initiative for Sustainable Energy Policy, Johns Hopkins University

#### **Research Visits**

April 2024 MIT Sloan, Technological Innovation, Entrepreneurship, and Strategic

Management group. With financial support from GEOCEP, an EU Horizon 2020

project.

#### **Education**

2012-2018 PhD in Sustainable Development

Columbia University, School of International and Public Affairs

"Essays on the Economics of Technological Change and the Environment"

Advisors: Scott Barrett, Geoffrey Heal, Suresh Naidu Committee: David Popp, Bhaven Sampat, Richard Nelson

PhD courses in micro and macroeconomics, econometrics, political economy.

development economics, environmental and resource economics.

2019 PGCertHE Certificate, London School of Economics 2012-2013 Graduate Diploma in Economics, University of London

Equivalent to BSc in Economics

2005-2008 Diplôme d'Ingénieur, Chimie-ParisTech

Equivalent to MSc in Chemistry and Chemical Engineering

2006-2007 Cycle in International Management, Ecole des Ponts ParisTech

2003-2005 Classes Préparatoires (PC), Lycée Fermat, Toulouse

Equivalent to BSc in Maths, Physics and Chemistry

#### **Research Interests**

Economics of the Environment, Innovation, Technical Change and Energy.

## **Work in Progress**

- How DOEs Government Funding Fuel Scientists?, with Todd Gerarden (Cornell), Kyle Myers (HBS) and Jacquelyn Pless (MIT Sloan)
- The Effects of Air Pollution on Inventor Productivity, with Ina Drouven (LSE) and Sefi Roth (LSE)
- Chapter on "Industrial Climate Policy, Technology, and Innovation" for Volume 2 of the Handbook of the Economics of Climate Change for Elsevier's "Handbook in Economics"

series (co-edited by Lint Barrage and Solomon Hsiang and to be published in Dec 2025), co-authored with Jacob Moscona (MIT)

## **Working Papers**

 Andres, Pia, Eugenie Dugoua, and Marion Dumas. "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?." (2022).

## **Journal Publications**

- Dugoua, Eugenie, and Todd Gerarden. "Induced Innovation, Inventors, and the Energy Transition". Accepted at **AER Insights** 1 August 2024.
- Dugoua, Eugenie, and Marion Dumas. "Coordination Dynamics Between Fuel Cell and Battery Technologies in the Transition to Clean Cars". Accepted at PNAS – 17 April 2024.
- Dugoua, Eugenie (2021) "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime." Accepted at The Review of Economics and Statistics – 29 November 2023.
- Dugoua, Eugenie, Marion Dumas, and Joëlle Noailly. "Text as Data in Environmental Economics and Policy." Review of Environmental Economics and Policy 16, no. 2 (2022): 346-356.
- Alem, Yonas, and Eugenie Dugoua. "Learning from Unincentivized and Incentivized Communication: A Randomized Controlled Trial in India." Economic Development and Cultural Change 71.1 (2022): 1-38.
- Dugoua, Eugenie, and Marion Dumas. "Green Product Innovation in Industrial Networks: A Theoretical Model." Journal of Environmental Economics and Management 107 (2021): 102420.

## Book Chapters, Reviews, Reports and Non-Refereed Publications

- Hanna R, Dugoua E, Nuñez-Jimenez A, Nock D, Arcusa S, Castellanos S, Davidson MR, Edwards MR, Galeazzi C, Gao X, Graff M, Kennedy KM, Kontou E, Lathwal P, Musa M, O'Rear E, Sivaranjani S, Zhang J, Zhu Q. "Support for climate policy researchers." Science. 2022 Dec 16;378(6625):1181. doi: 10.1126/science.adf8956. Epub 2022 Dec 15. PMID: 36520902. Link here.
- Dugoua, Eugenie. 2022. "Research and Innovation Policies for the Green Transition".
   Chapter in the 2022 SRIP Report: Science, Research and Innovation Performance of the EU. Link <a href="https://here.">here.</a>

#### Other Publications

- Dugoua, Eugenie, Ryan Kennedy, Myriam Shiran, and Johannes Urpelainen. "Assessing reliability of electricity grid services from space: the case of Uttar Pradesh, India."
   Energy for Sustainable Development 68 (2022): 441-448.
- Dugoua, Eugenie, Ryan Kennedy, and Johannes Urpelainen. "Satellite data for the social sciences: measuring rural electrification with night-time lights." **International Journal of Remote Sensing** 39, no. 9 (2018): 2690-2701.
- Dugoua, Eugenie, Ruinan Liu, and Johannes Urpelainen. "Geographic and socioeconomic barriers to rural electrification: New evidence from Indian villages." Energy Policy 106 (2017): 278-287.
- Dugoua, Eugenie, and Johannes Urpelainen. "Relative deprivation and energy poverty: when does unequal access to electricity cause dissatisfaction?" International Journal of Energy Research 38, no. 13 (2014): 1727-1740.

## **Previous Research and Work Experience**

2015-2016 Research assistant, Suresh Naidu, Columbia University

	EUGENIE DUGOUA
2008-2010	Technical brand manager, Research & Development, Procter and Gamble, Belgium
2008 Jan-Jul	<u> </u>
Awards and	Grants
2023	Geography and Environment Department Seed Fund (£5000). Project: Induced Innovation, Inventors, and the Energy Transition
2022	Journal of Economic Geography Best Referee Award
2021	LSE Research Support Fund (£16000). Project: Greening the Automotive Industry: An Empirical Analysis of Innovation in Production Networks and its Implications for Green Industrial Policy
2020	LSE STICERD Research Grant (£5000). Project: Induced Innovation, Inventors, and the Energy Transition
2020	NBER Economics of Innovation in the Energy Sector (\$7500) Honorarium for Project: "Green Innovation in Production Networks: Empirical Evidence from the Auto Industry"
2020	NBER Economics of Innovation in the Energy Sector (\$7500) Honorarium for Project: "Induced Innovation, Inventors, and the Energy Transition"
2019	LSE STICERD Research Grant (£5000). Project: Supply chain networks and innovation: an empirical investigation
2019	UKERC (UK Energy Research Centre) IVUGER (Increasing Visibility of Underrepresented Groups in Energy Research) (£3800). Project: Beyond the technical: social and political implications of delivering a low carbon heat future
2017-2018	Dissertation Fellowship, Columbia University
2016-2017	Mellon Interdisciplinary Graduate Fellowship, Columbia University
2015	Graduate Global Policy Research fellowship, Columbia University
2012-2017	Dean's Fellowship, Columbia University
Teaching	
	ol of Economics, Department of Geography and Environment:
2024 –	Deputy Director PhD in Environmental Economics
2018 –	Course coordinator, GY222 Applied Environmental Economics (BSc) Lecturer, GY222 Applied Environmental Economics (BSc) (6 weeks) Lecturer, GY426 Environmental and Resource Economics (MSc) (3 weeks)
2021 - 2024	Lecturer, GY420 Environmental Regulation (MSc) (2 weeks)
2021 – 2022	Deputy Director MSc Environmental Economics and Climate Change
2018 – 2021	Lecturer, GY455 Economic Appraisal and Evaluation (MSc) (2 weeks)
<u>Columbia Uni</u>	versity, School of International and Public Affairs:
Spring 2017	Teaching assistant, Economic Development (Miguel Urquiola)
Fall 2016	Teaching assistant, Growth and Economic Development (Xavier Sala-i-Martin)

## **Doctoral students:**

Fall 201

Spring 2014 Fall 2013

- Salvatore Finizio, starting September 2024.
- Ina Drouven, expected graduation in October 2024.

Summer 2015 Textbook companions for *The Age of Sustainable Development* (Jeffrey Sachs) Spring 2015 Teaching assistant, Challenges of Sustainable Development (Jeffrey Sachs)

Teaching assistant, Political Economy of Development (Chris Blattman)

Teaching assistant, State and Society (Victoria Murillo)

Teaching assistant, Energy Economics (Gernot Wagner)

- **Julien Picard**, expected graduation in May 2024, postdoctoral researcher at the European Institute of Environmental Economics in Milano (2024 ).
- **Yang Zheng,** graduated in April 2023, Lecturer (Assistant Professor) at Aston Business School, Aston University (2024 ).
- **Leanne Cass,** graduated in April 2022, postdoctoral researcher at the Grantham Research Institute (2023-2024), postdoctoral researcher at the University of Helsinki (2024 ).

## **External PhD Examining**

- Yoan Wallois (Université de Lille) December 2024 (expected).
- Eugenie Joltreau (Paris Dauphine) 2021.

## Other Mentoring and Supervision

2023-2024 2022-2023 2021-2022 2020-2021	10 undergraduate mentees, 13 MSc mentees, 8 MSc dissertations 13 undergraduate mentees, 9 MSc mentees, 7 MSc dissertations 8 undergraduate mentees, 6 MSc mentees, 7 MSc dissertations 11 undergraduate mentees, 6 MSc mentees, 3 UG and 10 MSc dissertations
2019-2020	10 undergraduate mentees, 8 MSc mentees and 10 MSc dissertations
2018-2019	6 undergraduate mentees, 14 MSc mentees and 10 MSc dissertations
Service	
2019 –	Member of the organizing and program committee for the annual London School of Economics/Imperial Workshop Environmental Economics
2023 –	Member of the scientific committee of UKNEE (UK Network for Environmental

## Economists) and the EnvEcon conference 2023 — Member of the scientific committee of ITIE's (Information Technology)

2023 –	Member of the scientific committee of ITIF's (Information Technology and
	Innovation Foundation, DC, USA) Climate-Tech Policy Boot Camp for Early
	Career Researchers

2024	Member of the scientific committee for the CEPR-NBB (Centre for Economic
	Policy Research - National Bank of Belgium) Joint Research Workshop on
	Reaching Net-Zero: Electricity Markets, Carbon Pricing, and Firms'
	Responses

2024	Member of the scientific committee for LEMNA Climate Workshop (Laboratoire
	d'Economie et de Management de Nantes-Atlantique)

2022 – 2024	Member of the scientific committee for the LSE Environment Week and the LSE
	Environment Day, organized by the Department of Economics at LSE
2022 - 2023	External examiner, Goldsmith, MSc Management of Innovation

2022 20	220	External examiner, Coldernal, wice management of innevation
2020 - 20	022	Member of the scientific committee for the Annual Congress of the
		European Economic Association

2020	Member of the scientific committee for the CEPR/EBRD/ECB Symposium on
	"Climate Change, Finance and Green Growth (Centre for Economic Policy
	Research / European Bank for Reconstruction and Development / European
	Control Pank)

	Central Bank)
2014-2015	President, Sustainable Development Doctoral Society, Columbia University
2015	Lead organizer, Interdisciplinary PhD Workshop on Sustainable Development,
	Columbia University

2013 Lead organizer, Science and Policy Summer School, Columbia University and

Science Po Paris

## **Referee Service**

Review of Economics and Statistics, American Economic Journal: Economic Policy, Management Science, The Economic Journal, Journal of the European Economic Association, Journal of the Association of Environmental and Resource Economics, Journal of Environmental Economics and Management, Journal of Economics & Management Strategy, Journal of Industrial Economics, Journal of Economic Geography, Review of Environmental Economics and Policy, PNAS (Proceedings of the National Academy of Sciences), Nature Energy, Ecological Economics, Environmental and Resource Economics, World Development, Energy Economics, Environment and Development Economics, Nature Sustainability, Energy Policy, Climate Change Economics, Joule, Climate Policy.

# **Invited Seminar Presentations (including scheduled):** 2024

- University of Tokyo (Tokyo, Japan), Economics Seminar, June 2024 (scheduled).
   "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- **GRIPS** (National Graduate Institute for Policy Studies, Tokyo, Japan), Seminar, June 2024 (scheduled). "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- University of Exeter (Exeter, UK), Land, Environment, Economics and Policy Institute Seminar, May 2024 (scheduled). "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- University of Illinois at Urbana-Champaign (USA), Agricultural and Consumer Economics Seminar, April 2024. "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- **Harvard Kennedy School** (Boston, USA), Environmental Economics Seminar, April 2024. "Induced Innovation, Inventors, and the Energy Transition"
- MIT Sloan School of Management (Boston, USA), Energy and Environment Seminar, April 2024. "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- Vrije Universiteit Amsterdam (Amsterdam Netherlands), Spatial Economics Seminar, March 2024. "Induced Innovation, Inventors, and the Energy Transition"

- Norwegian School of Economics (Bergen, Norway), Business and Management Science Seminar, October 2023. "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- University of Pisa (Pisa, Italy), Economics and Management Seminar, October 2023. "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- Virtual Sustainable Development Seminar (online), June 2023. "Global Coordination Challenges in the Transition to Clean Technology: Lessons from Automotive Innovation"
- International Monetary Fund (IMF) (online), Seminar Series on Climate Change, February 2023. "Induced Innovation, Inventors, and the Energy Transition"

- University of California, San Diego (USA), Deep Decarbonization Initiative Seminar (online), February 2023. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- Center for Environmental Economics Montpellier (Montpellier, France), Environmental Economics Seminar, January 2023. "Induced Innovation, Inventors, and the Energy Transition"

## 2022

- Université Paris Dauphine-PSL (Paris, France), Laboratoire d'Économie de Dauphine (LEDa) Seminar, June 2022. "Induced Innovation, Inventors, and the Energy Transition"
- **Toulouse School Economics** (France), Environmental Economics Seminar, May 2022. "Induced Innovation, Inventors, and the Energy Transition"
- University of East Anglia (UK), Economics Seminar, May 2022. "Induced Innovation, Inventors, and the Energy Transition"
- Oxford University (UK), Climate Economics Seminar, March 2022. "Induced Innovation, Inventors, and the Energy Transition"
- Oxford University (UK), INET (Institute for New Economic Thinking) Seminar, March 2022. "Global Coordination Challenges in the Transition to Clean Technology: Lessons from Automotive Innovation"
- Paris School of Economics (France), Environmental Economics Seminar, February 2022. "Induced Innovation, Inventors, and the Energy Transition"

## 2021

- University of California, Berkeley (San Francisco, USA) Agricultural and Resources Economics Seminar (online), November 2021. "Induced Innovation, Inventors, and the Energy Transition"
- Stockholm School of Economics (Sweden), Stockholm Institute of Transition Economics Seminar (online), October 2021. "Induced Innovation, Inventors, and the Energy Transition"
- University of Pennsylvania, The Wharton School, Business Economics and Public Policy Department (Philadelphia, USA), Energy Economics & Finance Seminar (online). February 2021. "Induced Innovation, Inventors, and the Energy Transition"

## <u>2020</u>

- Duke Kunshan University (Kunshan, China), Economics Seminar (online). December 2020. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- Yale University (New Haven, USA), Environmental Economics Seminar (online). November 2020. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"

• London School of Economics (London, UK), SEDS (Social and Economic Data Science) Seminar, November 2019. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"

#### 2018

- MIT Sloan (Boston, USA), Technological Innovation, Entrepreneurship, and Strategic Seminar, January 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- Haverford College (Haverford, USA), Economics Seminar, January 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- University of California, Santa Barbara (Santa Barbare, USA), Economics / Bren School for the Environmental Joint Seminar, January 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- London School of Economics (London, UK), Environmental Economics Seminar, January 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- Toulouse School of Economics (Toulouse, France), Environmental Economics Seminar, January 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- **Tilburg University** (Tilburg, Netherlands), Tilburg Law and Economics Center, February 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- University of Oregon (Eugenie, USA), Economics Seminar, February 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- Mines ParisTech (Paris, France), CERNA Seminar, June 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"

## **Invited Conferences Presentations (including scheduled):**

- IFC Flagship Conference on Digital Economy and Development (International Finance Corporation), Paris (France), January 2024. "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- Macroeconomics and Climate ESADE Workshop, Barcelona (Spain), March 2024.
   Discussion.
- **EnvEcon Conference**, UKNEE (UK Network for Environmental Economists), London (UK), March 2024. "Induced Innovation, Inventors, and the Energy Transition"
- SusDev Biennial Research Conference (Columbia University, Sustainable Development), New York (USA), April 2024. "How DOEs Government Funding Fuel Scientists?"

- LSE CEP Annual Conference (London School of Economics, Center for Economic Performance), London (UK), May 2024. "Induced Innovation, Inventors, and the Energy Transition" (scheduled)
- AERE Conference (Association of Environmental and Resource Economists),
   Washington DC (USA), May 2024. "The Effects of Air Pollution on Inventor Productivity" (scheduled)

#### 2023

- **IEA Congress** (International Economic Association), Medellin (Colombia), December 2024. "Induced Innovation, Inventors, and the Energy Transition"
- FAERE Conference (French Association of Environmental and Resource Economists), Montpellier (France), September 2024. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- **EEA Conference** (European Economic Association), Barcelona (Spain), August 2024. "Induced Innovation, Inventors, and the Energy Transition"
- NBER EEE Summer Institute "Egg-Timer" (National Bureau of Economic Research, Environment and Energy Economics), Boston (USA), July 2023. "Induced Innovation, Inventors, and the Energy Transition"
- **EAERE Conference** (European Association of Environmental and Resource Economists), Limassol (Cyprus), June 2023. "Induced Innovation, Inventors, and the Energy Transition"
- **DRUID Conference** (Danish Research Unit for Industrial Dynamics), Lisbon (Portugal), June 2023. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- AERE Conference (Association of Environmental and Resource Economists), Portland (Maine, USA), May 2023. "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- Harvard Business School Junior Innovation Economics Workshop, Boston (USA),
   May 2023. "Induced Innovation, Inventors, and the Energy Transition"
- Welfare and Policy Conference, Bordeaux (France), May 2023. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- CESifo Energy Climate Area Conference (Center for Economic Studies and Ifo Institute for Economic Research), Munich (Germany), March 2023. "Induced Innovation, Inventors, and the Energy Transition"

- Morzine Workshop on "Sustainable Economy Harnessing innovation, finance and skills for the low-carbon transition", Morzine (France), April 2022. "Directed Technological Change and General Purpose Technologies: Can Al Accelerate Clean Energy Innovation?"
- LSE Environment Week Conference, London (UK), September 2022. "Induced Innovation, Inventors, and the Energy Transition"

- University of Bristol Economics of Innovation Workshop, Bristol (UK), November 2022. "Induced Innovation, Inventors, and the Energy Transition"
- CEPR's 5th Joint Research Conference on Firm Organisation, Firm Financing and Firm Dynamics (FirmOrgDyn 2022), Paris (France). "Induced Innovation, Inventors, and the Energy Transition"
- LSE CEP Annual Conference, London (UK), May 2022. "How DOEs Government Funding Fuel Scientists?"
- SusDev Biennial Research Conference, Columbia University, New York (USA), April 2022 (online). "Induced Innovation, Inventors, and the Energy Transition"

#### 2021

- **EEA Conference** (European Economic Association), online, August 2021. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- CEPR/EBRD/ECB Symposium on "Climate Change, Finance and Green Growth (Centre for Economic Policy Research / European Bank for Reconstruction and Development / European Central Bank), June 2021. Discussion.
- **NBER Energy Innovation Workshop** (National Bureau of Economic Research), Boston (USA), online, September 2020. "Induced Innovation, Inventors, and the Energy Transition"
- CEPR Climate Science and Economics Workshop (Centre for Economic Policy Research), online, March 2021. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- AEA Conference (American Economic Association), online, Jan 2021. "Global Coordination Challenges in the Transition to Clean Technology: Lessons from Automotive Innovation"

#### 2020

- NBER Energy Innovation Workshop (National Bureau of Economic Research), Boston (USA), online, September 2020. "Global Coordination Challenges in the Transition to Clean Technology: Lessons from Automotive Innovation"
- CESifo Energy and Climate Economics Conference (Center for Economic Studies and Ifo Institute for Economic Research), online, March 2020. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- **IEA Conference** (International Economic Association) (scheduled but cancelled because of COVID)
- AEA Conference (American Economic Association), online, January 2021. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"

- **EEA Congress** (European Economic Association), Manchester (UK), August 2019. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- Economics of Environmental Policy and Innovation Workshop (Canada 150 Chair

   Climate Economics, Innovation, and Policy), Ottawa (Canada), July 2019. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- **EAERE Conference** (European Association of Environmental and Resource Economists), Manchester (UK), June 2019. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- AERE Conference (Association of Environmental and Resource Economists), Lake Tahoe (USA), May 2019. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"

- University of California, Santa Barbara Occasional California Workshop on Environmental and Resource Economics, Santa Barbara (USA), November 2018.
   "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- **NBER Innovation Summer Institute** (National Bureau of Economic Research), Boston (USA), July 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- **NBER EEE Summer Institute** (National Bureau of Economic Research, Environment and Energy Economics), Boston (USA), July 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"
- **SELE Annual Meeting** (Society for Environmental Law and Economics), Chicago (USA), June 2018. "Induced Innovation and International Environmental Agreements: Evidence from the Ozone Regime"