

# DENIS LOMOV

Updated February 2026

University of California, Santa Barbara  
Department of Political Science  
EGAPE Lab & 2035 Initiative

**Website:** [www.denislomov.com](http://www.denislomov.com)  
**Email:** [lomov@ucsb.edu](mailto:lomov@ucsb.edu)  
**Google Scholar:** [Profile](#)  
**GitHub:** [denlomov](#)

---

## EMPLOYMENT

### University of California, Santa Barbara

PhD Candidate in Political Science

Graduate Researcher & Teaching Assistant, Department of Political Science

2022 – Present Courses Co-Instructed: [View](#)

Courses TAed: [View](#)

Evaluations: [Student Feedback](#)

Lemelson Fellow

Lemelson Center for the Study of Invention and Innovation,

Smithsonian Institution

2026 – 2027 (Upcoming)

## EDUCATION

### University of California, Santa Barbara

Ph.D. in Political Science, Aug 2022 – Present

M.A. in Political Science, June 2025

Dissertation: *The Political Economy of Carbon Dioxide Removal Policies in Advanced Democracies*

Committee: Paasha Mahdavi (Chair), Leah Stokes, Matto Mildemberger, Bruce Bimber

### Moscow School of Social and Economic Sciences / University of Manchester

B.A. in Political Science & B.A. in International Relations (Dual Degree), 2017 – 2022

## RESEARCH

### Peer-Reviewed Articles

Lomov, D., & Mahdavi, P. (2026). “Limited Impacts of Shareholder Pressure on Climate Strategy of Fossil Firms.” *Business & Politics*. Published.

Barinova, V., Devyatova, A., & Lomov, D. (2021). “The Role of Digitalization in the Global Energy Transition.” *International Organisations Research Journal*, 16(4), 126–145.

<https://doi.org/10.17323/1996-7845-2021-04-06>

Loginova, A., Lomov, D., & Machnev, K. (2022). “Youth Non-Profit and For-Profit Solutions toward Achieving Sustainable Development Goals in Russia: Practices, Challenges and Trends.” *Environmental and Earth Sciences Proceedings*, 15(1), 58.

<https://doi.org/10.3390/envirosciproc2022015058>

## Working Papers

Lomov, D., & Mahdavi, P. “Measuring Firm Climate Strategy Using Transformer-Based Language Models.” Presented at APSA 2025.

Lomov, D., & Gaines, K. “Manufactured Acceptance of CCS Permits: Evidence from the Class VI Permitting Process.” 2026.

Lomov, D. “When Regulators Innovate: Early (Un)Green Industrial Policy for Fossil Fuel Firms in the U.S.” Presented at ATLC 2025. Slides.

Lomov, D., & Zhazhin, K. “Who Benefits? Disparities in the Impact of Changing Energy Prices in the U.S.” Presented at WPSA 2025. Slides.

Lomov, D., & Quinn, O. “Data Centers and the Distributive Politics of AI Infrastructure.” Accepted at EPG 2026.

## In Progress

Lomov, D. “The Impact of 45Q on Carbon Capture Deployment in the United States.” 2025.

## RESEARCH PROJECTS

### CCS Policy Variation in Advanced Democracies

*Dissertation, in progress*

Comparative analysis of carbon capture and storage policy across the U.S., Canada, Norway, and Australia, examining dimensions of policy durability, technological scope, and instrument design. Uses within-case process tracing with Bayesian probability.

*Methods: Comparative policy analysis and process tracing*

### Manufactured Acceptance in U.S. Carbon Storage Permitting

*Working paper, 2026*

Analyzed 320 public comments from five EPA Class VI carbon storage projects using NLP (zero-shot transformer classification, dictionary-based topic retrieval). Found that approximately 40% of community concerns fall outside EPA regulatory authority, revealing a “recognition filter” that manufactures acceptance.

### Early Industrial Policy for CCS in the U.S.

*Working paper, 2025*

Traces Section 45Q carbon capture tax credit origins to Enhanced Oil Recovery infrastructure. Original data on 139 EOR projects. Key finding: top 5 EOR operators account for over 70% of production and 97% of CCUS lobbying expenditure came from fossil fuel interests.

### Political Determinants of Clean Energy Innovation

*Working paper, 2025*

County-level panel analysis (2000–2024) examining how gubernatorial partisan control and legislative composition affect state clean energy patenting. Finding: Democratic governors promote clean energy innovation only with split legislatures, increasing patents by approximately 20%.

### Data Centers and the Distributive Politics of AI

*In progress, 2025*

With Olivia Quinn. Novel dataset linking all U.S. data centers to county-level outage records, EPA environmental justice data, and socio-political variables. Examines how federalism and business power shape AI infrastructure siting.

### Climate NLP Models

*Active*

Fine-tuned transformer models for analyzing climate communication in SEC filings and regulatory documents. Includes ClimateBERT variants and custom classifiers for corporate climate strategy signals.

## SELECTED AWARDS & FELLOWSHIPS

EGAPE Lab Research Fellowship, UC Santa Barbara, Department of Political Science (2022–Present)  
Carl Menger Fellowship (2025–2026)  
Holly Jennings Award for Academic Excellence (2025)  
Department of Political Science Research Grant, UC Santa Barbara (2025)  
Lambda’s Research Grant Program for Researchers in AI (2024)

## CONFERENCES & PRESENTATIONS

Atlanta Conference on Science and Innovation Policy (ATLC), 2025. Slides and Poster.  
Western Political Science Association (WPSA), 2025. Paper presentation. Slides.  
American Political Science Association (APSA), 2025, 2024, 2023. Paper presentations. 2024 Slides.  
Environmental Politics and Governance (EPG), 2026, 2024, 2023. Full Paper acceptances.  
Political Economy of Climate and the Environment (PECE), 2024 (University of Pennsylvania), 2023 (UCLA). Participant.  
Environmental Politics Workshop, UC Santa Barbara, 2024, 2023. Presentations.  
Data Science Showcase, UC Santa Barbara, 2024. Presentation. Slides.

## SERVICE

Secretary, Political Science Graduate Student Council, UC Santa Barbara (2023–2024).  
Department Representative, Political Science Graduate Student Association to the University-wide Graduate Student Association (2025–2026).  
Mentor, Civic Leadership Fellowship, 2025 Cycle.

## ADDITIONAL PROFESSIONAL EXPERIENCE

**KPMG, Sustainability and Risks**, Moscow, Russia  
Consultant, 2021 – 2022

**Transparency International**, Moscow, Russia  
Intern, 2020 – 2021

**Sustainable Development Solutions Network Youth Russia**, Moscow, Russia  
Deputy Coordinator, 2020 – 2021