Building sustainable prosperity in a changing global environment through rigorous, policy-relevant, interdisciplinary research and training of the next generation of leaders.
CIERP BY THE NUMBERS 07/2022-06/2023

37 PUBLICATIONS

25 AFFILIATED FACULTY

15 EVENTS

37 CAPSTONES Supervised by CIERP faculty

26 Student travel fund awards

31,100 website visits (20,000 CPL & 11,100 CIERP)

$2.6 million IN NEW GRANTS

11 FUNDED INTERNSHIPS $136,275 IN NEW GIFTS

47 BLOG POSTS 9 Climate Smart 38 Community Voices

$382,921 in student scholarships and employment

35 Student employees

NEW 8 GRANTS

ACTIVE 24 GRANTS

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AS WE WRAP UP ACADEMIC YEAR 2022–23, we reflect on new connections made and partnerships that continue to grow. As many of you know, the Center for International Environment and Resource Policy (CIERP) at The Fletcher School is comprised of faculty, staff, doctoral fellows, and post-docs, as well as an extensive network of government officials, scholars, and policy experts who contribute insights that enable comparative study. Our primarily grant-funded Center is focused on policy-relevant research that enables sustainable and resilient development. This includes Jenny Aker’s work on economic development in Africa, Kelly Sims Gallagher’s Climate Policy Lab (CPL), Melissa McCracken’s Shared Waters Lab, and other projects. CIERP is also a hub for master’s-level student engagement with environment and resource topics at Fletcher.

We are thrilled to continue to be part of student success and to delve deeper into our ongoing research projects, thanks to support from our donors. New funding this year allowed us to increase funding for students in the form of tuition and other scholarships. We were also excited to support many more students embarking on trips to conferences and internships around the world. As has become our tradition, we celebrated our graduating students’ achievements at a luncheon this May, where we wished them well as they go out into the world to become climate and environmental leaders.

Over the past year, we were proud to see several of our doctoral students and postdoctoral fellows publish their work in venues with a broad public reach like The Conversation and The Diplomat. We continue to provide interviews and op-eds for other news sources including the BBC, New York Times, LA Times, The Hill, and Scientific American. Of course, we also publish our research findings in peer-reviewed scholarly journals and university presses to ensure that they are of the highest possible quality and to participate in the exchange of knowledge in our field.

In the spirit of including experts on the ground in this exchange of knowledge, we held our second annual Climate Policy Summer Academy this May. We offered both a core and specialized program, the latter featuring new content for returning participants. With this program, we have already built an extensive global network that allows our team as well as each country’s experts to continue to learn from one another and work in collaboration to drive meaningful change through climate policy.

We wish to acknowledge the support of our funders, all listed on our website, who have made this and other work possible. We are also deeply grateful to the many individual donors who continue to show their support for our mission with their gifts. Finally, we thank our administrators Mieke van der Wansem, Jillian DeStone, Sara Rosales Laverty, and Jenna Clark for making so much of our work happen.

Sincerely,

Jenny C. Aker, CIERP Co-Director
Director of the Fletcher Leadership Program in Financial Inclusion (FLPFI)
Professor of Development Economics

Kelly Sims Gallagher, CIERP Co-Director
Director of the Climate Policy Lab
Academic Dean and Professor of Energy & Environmental Policy
CIERP celebration of graduating students in May 2023
Professor Jenny Aker is finalizing a forthcoming book entitled “Mobile Phones and Development: Does the Evidence Meet the Hype?” and a documentary film on education in Niger to be released by end of summer 2023.

Two CIERP faculty affiliates formally joined Fletcher this year via courtesy appointments with the School: Erin Coughlan de Perez is Dignitas Associate Professor at Tufts’ Friedman School of Nutrition Science and Policy, faculty at the Feinstein International Center, and senior advisor to the Red Cross / Red Crescent Climate Centre. Deborah Sunter is Assistant Professor at Tufts’ School of Engineering in the Department of Civil and Environmental Engineering with secondary appointments in Computer Science and Mechanical Engineering. She is currently serving as a Senior Advisor of Energy Justice Policy and Analysis at the U.S. Department of Energy.

We welcomed Travis Franck in August 2022 as Climate Modeling and Policy Director at CPL. He also has an appointment as Assistant Research Professor at Fletcher. Franck brings his expertise in building system dynamics models to the Raising Ambition project, which provides capacity-building support to develop deep decarbonization pathways for fast-emerging economies.

In December 2022, Travis Franck and Predoctoral Research Fellow Tarun Gopalakrishnan spoke at the Diplomatic Academy of Vietnam’s Foreign Service Training Centre on the CPL Raising Ambition project.

Professor Kelly Sims Gallagher was awarded the 2022 Friedrich Schiedel-Prize for Politics and Technology which is awarded annually to outstanding individuals from science, politics, economics, and other public spheres who actively and innovatively contribute to inter- and transdisciplinary projects linking politics and technology. Closer to home, she also served as an advisor on the Massachusetts Clean Energy and Climate Plan for 2050 (2050 CECP) and contributed to the determination letter of the Secretary of the Executive Office of Energy and Environmental Affairs setting the statewide greenhouse gas emissions limit and sector-specific sub-limits for 2050.

This past fall, Amy Myers Jaffe was appointed Director of the NYU SPS Center for Global Affairs’ Energy, Climate Justice, and Sustainability Lab. She continues to be involved with CPL as a non-residential Senior Fellow. Jaffe participated in a high-level ad hoc thematic dialogue on energy for the European Central Bank in November 2022. She also spoke alongside industry leaders and change-makers in energy innovation and sustainable solutions at New York Energy Week in June 2023.

This fall, we will welcome Maulik Jagnani to Fletcher as Assistant Professor of Environmental Economics and CIERP faculty affiliate. He joins us from the University of Colorado Denver, where he is currently an Assistant Professor in the Department of Economics. Professor Jagnani’s research focuses on microeconomic topics in environmental health and human capital in lower-income countries.


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- Predoctoral Research Fellow Hengrui Liu moderated the Developing Sustainable Transportation Infrastructure panel at Tufts Energy Conference on March 2, 2023.

- Gina McCarthy joined Climate Policy Lab as Senior Fellow. The first-ever White House National Climate Advisor and former U.S. EPA Administrator, McCarthy is one of the nation’s most respected voices on climate change, the environment, and public health.

- Professor Melissa McCracken was an invited speaker at the Inter-Parliamentary Union Hearing at the United Nations on Water for People and the Planet in February 2023. She also led a delegation of Tufts graduate students to the March 2023 UN Water Conference and while there, spoke at the Women in Water Diplomacy Symposium.

- In March 2023, Postdoctoral Scholar Zdenka Myslikova and Assistant Researcher Nathaniel Dolton-Thornton provided briefing memos at the request of U.S. Department of Energy leadership on CPL’s climate inventories and RD&D data.

- Faculty affiliate and former postdoc Easwaran Narassimhan spoke in March 2023 on a roundtable on non-pricing policy levers at G20 Second Sustainable Finance Working Group Meeting in India.

- Junior Research Fellow Seth Owusu-Mante spoke on the panel “Building Sustainable Futures in Africa” at the 2023 Fletcher Africana Conference with Ketura Brown, U.S. Foreign Service Officer, Lily Odorno, Director of Energy and Climate Innovation in Africa at Clean Air Task Force, and Jon Vandeheuvel, CEO, Small Farm Cities.

- Professor Mihaela Papa and former postdoc Zongyuan Zoe Liu were honored at the September 2022 International Studies Association West annual meeting with the Best Faculty Paper Award for their 2021 paper “Collective De-dollarization Statecraft: The Case of BRICS.” They also published a book stemming from this paper entitled Can BRICS De-dollarize the Global Financial System? with Cambridge University Press.

- In April 2023, Senior Associate Director Mieke van der Wansel taught two three-hour classes on Negotiating for Sustainable Development for the course “Human Dimensions of Conservation Medicine” at the Tufts Cummings School of Veterinary Medicine. The classes included lectures, short exercises, and a multi-stakeholder negotiation simulation on a floodplain dispute in Eastern Africa.

- Postdoctoral Scholar Abay Yimere was invited to the Second Dakar Financing Summit for Africa’s Infrastructure in Dakar, Senegal in February 2023.

- We are welcoming a new Program Coordinator to CIERP in July 2023, Max Zandi, who recently completed a Master’s degree at George Washington University’s Elliott School of International Affairs. We wish our current Program Coordinator, Jenna Clark, all the best as she embarks upon full-time study towards a MALD degree at Fletcher. And we thank her for her many contributions to CIERP!
From left: CIERP faculty affiliate and former postdoc Rishikesh Bhandary, Postdoctoral Scholar Abay Yimere, MGA student Emily Dahl, CIERP Senior Associate Director Mieke van der Wansem, and Predoctoral Research Fellow Hengrui Liu at COP27
This year, Climate Policy Lab published a new data set with interactive graphic visualization on global public investments in energy research, development, and demonstration (RD&D) since 2000. This is the first comprehensive database covering public expenditures in RD&D for countries that have declared an interest in and commitment to innovation in clean energy technologies. A blog post sheds light on the origins of the effort and the data collection. We intend to continue tracking public investments in energy RD&D globally and to analyze the respective roles of state-owned enterprises and the private sector in achieving the low-carbon transition.

Suman Bery, Vice Chair of Niti Aayog (see more government engagement under “Goal 3” below). We published a policy brief in September 2022, Pathways to Deep Decarbonization: Aligning India’s NDC Submission with its Net-Zero Ambition, and submitted an article to a peer-reviewed journal.

Amy Myers Jaffe and eight CPL research fellows prepared the background data and analytical report on climate finance requirements for African adaptation and resilience for the Independent High-Level Expert Group on Climate Finance and the United Nations Economic Commission for Africa (UNECA) to support the Autumn 2022 African Ministerial gatherings on climate finance. Jaffe participated remotely in the UNECA meeting in Addis Ababa, Ethiopia where the results were shared.

CPL received new funding to work with Winrock International on the feasibility of scaling up the replacement of diesel with solar-powered community water pumping in Ethiopia. Postdoctoral Scholar Abay Yimere and faculty affiliate Easwaran Narassimhan are taking the lead on this three-year project.
CIERP faculty affiliates Karen Jacobsen and Justin Hollander received new funding to extend their research on “Mapping Urban Climate Change Threats, Environmental Migration and Municipal Policy Response in African Inland Cities” to Kampala, Uganda. They recently completed and published a climate risk assessment of Addis Ababa, Ethiopia with Postdoctoral Scholar Abay Yimere and colleagues at Woodwell Climate Research Center. This assessment illustrates the links between climate change, land and water management, and vulnerable populations in Addis. We examined projected changes in extreme heat, drought, and flooding. Our analysis explores how these changes have affected—and will continue to impact—informal settlements, land and water use, and development plans within the city.

Climate Policy Lab was awarded a $1 million dollar grant from the Rockefeller Brothers Fund to continue understanding China’s role in the global transition to net zero. This grant further supports our Raising Ambition project, which aims to assist major emerging and developing countries currently considering how to expand their climate commitments, helping them to learn from examples of successful policy design and implementation. Going forward, international climate finance will be critical to future global climate agreements, and we are studying how to close the gap in international finance for deep decarbonization, energy justice, and green industrialization in the global south, while investigating how to prioritize efforts that not only lower emissions, but also simultaneously build resilience and adaptation to worsening climate impacts.

Erin Coughlan de Perez is leading a climate adaptation research project entitled “Today’s Risk of Extreme Events in a Changing Climate.” The project studies the current risk of extreme events and climate adaptation preparedness in several locations in the U.S. through climatic analysis, interviews, document analysis, and scenario workshops. Amy Myers Jaffe hosted a workshop at NYU in April 2023 about potential future climate scenarios called “Imagining 2040: Climate Storytelling Through Scenarios.” Professor Coughlan de Perez and Program Coordinator Jenna Clark both spoke at the event, and Senior Associate Director Mieke van der Wansem facilitated a discussion table. This workshop format was used for the study’s pilot locations in June 2023.
Professor Jenny Aker obtained new funding from the King Climate Action Initiative (KCAI) and USAID-DIV for scaling up her work on demi-lunes work in Niger. She and her collaborators also had a paper on the impact of demi-lunes accepted for publication in the Review of Economics and Statistics. Demi-lunes and zaï are rainwater harvesting techniques designed to collect rainfall and runoff and increase the nutrient content of the soil. These technologies are accessible to farmers and appropriate for the type of degraded soil (glacis) that is prevalent in Niger and other Sahelian countries. Aker and team have worked with the Ministry of Environment in Niger to test the impact of training on the adoption of these techniques.

Under the leadership of Professor Mihaela Papa, the Rising Power Alliances project, a four-year, federally funded grant project, wrapped up with a conference on global governance in December 2022, which was featured in a Tufts Daily article. The full project report available online details the team’s research, which has made significant contributions towards understanding the challenges the U.S. faces in addressing the existence and the deepening of revisionist coalitions. It rethinks wedge strategies and examines the opportunities for dialogue among the U.S. and other regional powers, including how separate climate, development, and security initiatives can be connected through mutually supportive objectives. Papa’s recent piece in The Conversation about this research has already garnered over 74,000 views.
CPL Junior Research Fellows Roba Jilo and Seth Owusu-Mante, Professor Kelly Sims Gallagher, Tsitsi Musasike, a sustainable development and sustainable finance specialist with experience at the Development Bank of South Africa, Postdoctoral Scholar Abay Yimere, Assistant Researcher Nathaniel Dolton-Thornton, and Agus Sari, CEO of Landscape Indonesia
COP27 in Egypt

CIERP was once again part of the Tufts University delegation of faculty, students, and staff to the annual Conference of the Parties, COP27, of the United Nations Framework Convention on Climate Change, where we organized and contributed to numerous events. Faculty, staff, and Fletcher Dean Rachel Kyte worked to provide students with excellent networking and learning opportunities, including meetings with the top EU climate negotiator and CIERP faculty affiliate, Jacob Werksman, members of the U.S. delegation, other U.S. and foreign government officials, and Fletcher alums. We held a public debrief of COP27, which is available to watch online.

A few highlights:
- This year at COP27, faculty and researchers were quoted in numerous high profile news outlets, including the New York Times (multiple times), Washington Post, Financial Times, Guardian, Times, Reuters, Le Monde, CNN, BBC, and Scientific American. Kelly Sims Gallagher published a Foreign Affairs piece that ran on the first day of COP27, “Time to Rethink Climate Finance,” while CPL Fellows Bethany Tietjen and Soyoung Oh and Postdoctoral Scholar Abay Yimere placed articles in The Conversation.

- The Government of Ethiopia was our partner for our official side event entitled: Policy, Regulation, and Climate Finance Development Scenarios for Renewable Energy in Africa, with a focus on Ethiopia’s updated NDC: Lessons learned on mitigation, adaptation, and means of implementation. CPL co-speakers Junior Research Fellow Seth Owusu-Mante and Postdoctoral Scholar Abay Yimere were joined by Dr. Fitsum Assefa, Minister for the Ministry of Planning and Development; Muluneh Hedeto, Ethiopian EPA; and Stephan Hoch, Perspectives Climate Group.

- Ethiopian Water and Energy Minister, HE Dr. Habtamu Itefa, made a significant announcement at our merged side event that Ethiopia would seek to diversity its electricity supply by adding more wind and solar to its hydro-dominated mix.
- **Professor Deborah Sunter**, together with her engineering student **Emily Holt** and CPL postdoctoral fellow **Abay Yimere** presented “Energy Transformation through Policy Innovation in Africa” at the Africa Pavilion. The focus of the event was on open access modeling tools to plan energy investment in a climate uncertain world, using a case study of the SWITCH Model for Ethiopia.

- **Kelly Sims Gallagher** gave a talk on “Low carbon economic transition: innovations and actions” at the China Pavilion, hosted by Tsinghua University and the Counsellors’ Office of the State Council (COSC). Co-speakers included Sun Zhen (Ministry of Ecology and Environment), **Zhu Tong** (State Council), and **Xu Huaqing** (NCSC).

- **Kelly Sims Gallagher** presented at the Global Alliance of Universities on Climate Event on Co-Learning for Climate Action event, “University-led Collaborative Research Partnerships to Support Equitable Science.” She spoke about shared learning on climate policy implementation.

To learn more, check out the [COP27 information page](https://www.cpl.cornell.edu/cop27) on the CPL website.

Under **Mieke van der Wansem**’s leadership, with many contributions from faculty, staff, and fellows, we held our second annual Climate Policy Summer Academy. This program focuses on training participants on our Policy Gap Analysis methodology and discussing how we can work together towards deep decarbonization. The curriculum included a combination of lectures, case studies, exercises, and group discussions to provide lessons learned from recent climate policy successes and failures. Participants from over ten different countries delved into the material starting with several virtual sessions and homework assignments, and then gathered in person for four days of intensive discussion, presentations, and exercises in modeling, scenario planning, and choosing a policy mix. Evening excursions allowed participants to enjoy some time getting to see Boston and further building connections. Returning participants from 2022 shared lessons learned and everyone explored ways to further develop plans to support their governments on national climate policy analysis. We will reconvene virtually later this summer to discuss the implementation of these plans.
Climate Policy Summer Academy participants in Boston


Gopalkrishnan, T. (2022, August 23). A tale of two climate policies: India’s UN commitments aim low, but its national policies are ambitious – here’s why that matters. The Conversation.


Oh, S. (2023, May 11). *What is carbon capture and storage? EPA’s new power plant standards proposal gives it a boost, but CCS is not a quick solution*. *The Conversation*.


Yimere, A. (2023, January 19). *Installing solar-powered refrigerators in developing countries is an effective way to reduce hunger and slow climate change*. *The Conversation*.

Tietjen, B. (2022, November 2). *Loss and damage: Who is responsible when climate change harms the world’s poorest countries?* *The Conversation*.

Check out all of our publications and media articles and appearances featuring CIERP researchers on our website.
**STUDENT SUCCESS**

**Lily Hartzell, MALD ‘2023**
*Climate Finance Negotiator, U.S. Department of State*

“I chose to come to Fletcher mostly because of CIERP and Fletcher’s strength in climate change. In the last two years, I have taken almost every climate course offered at the school and gone to dozens of events hosted by CIERP. Most impactful were my two trips to attend COP. CIERP helped sponsor me to attend both COP26 in Scotland and COP27 in Egypt. These experiences solidified my interest in multilateral climate diplomacy, and helped me build the connections that ultimately led to my job working as a climate finance negotiator for the State Department. Next year at COP I will be on the U.S. delegation, and I look forward to meeting the Fletcher students in attendance.”

**Emily Dahl, MGA ‘2023**
*Deputy Director for Climate Adaptation and Resilience, and Climate Finance Strategist, State of Massachusetts*

“CIERP has been such an integral part of my Fletcher experience. When the CIERP team heard that I was interested in summer research before my first semester, they got me involved in a Climate Policy Lab research project on equity in federal energy loan programs with Professor Jaffe, Dean Gallagher, and fellow researchers. Since then, I’ve valued the many opportunities I’ve had to learn about timely research and policy analysis from Fletcher and beyond through events with faculty, our stellar cohort of PhD and postdoctoral researchers, and guest speakers. I’ve also appreciated CIERP’s support in enabling my participation in the Arctic Circle Assembly in Iceland and UNFCCC COP27 in Egypt, and providing a platform for me to reflect on these experiences. Most of all, I’ve loved the sense of community CIERP has fostered, and am grateful to be leaving Fletcher with friends who I’ll look forward to working with in our future climate and environmental endeavors.

Since completing my master of global affairs in international development and environmental policy this past winter, I’ve been consulting with the Charles River Watershed Association on regional flooding governance strategies and the World Bank on developing and scaling an initiative for Amazon rainforest conservation finance. This July, I’ll be joining Massachusetts state government as deputy director for climate adaptation and resilience, and climate finance strategist. I know I’ll be drawing on my CIERP experiences and Fletcher classes to inform my work, and will continue to stay involved with our community.”

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*Students in Professor Gallagher’s Climate Change Law and Policy course, co-taught with Jacob Werksman, participate in an all-day climate simulation in spring 2023. In foreground from left to right, Aarushi Aggarwal and Eda Kosma*
FINANCES IN REVIEW: 7/22–6/23

Total Expenditures by Funding Source (7/22–6/23)

- $2,398,597 Grants
- $139,881 Gifts
- $126,398 Fletcher School Support
- $29,244 University Support
- $5,686 Earned Income
- $2,699,806 Total

We gratefully acknowledge our current grant funders on our website.

Annual Center Growth (2014–2023)

Total Expenditures
Affiliated Faculty
Active Grants

- We gratefully acknowledge our current grant funders on our website.

We gratefully acknowledge our current grant funders on our website.
STAYING CONNECTED

We thank the many supporters of CIERP who make our work possible. Please follow us on social media and join our mailing list to hear about our latest work. And send us your updates as well.

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