

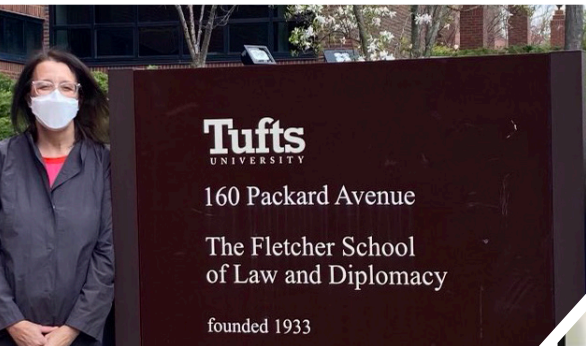
Year in Review

July 2020-June 2021

Building sustainable prosperity in a changing global environment through rigorous, policy-relevant, interdisciplinary research and training of the next generation of leaders



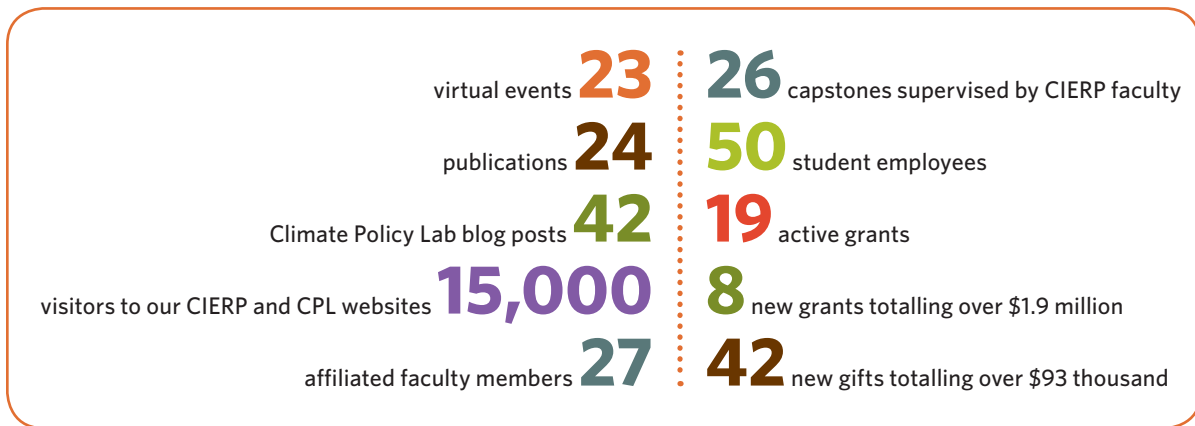
CIERP
Center for International
Environment & Resource Policy



**THE FLETCHER
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CIERP by the Numbers



The Wacha Commune in Niger, June 2021

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2020-2021 Directors' Note

Dear Friends of CIERP,

We are pleased to share our *Year in Review* with you this year in a new format. This report is entirely electronic and allows you to link to our website and publications for more information as you peruse it. We hope you will take a few moments to learn about the work that has been accomplished at CIERP over the past year.

As you will see, we've continued our existing research projects and disseminated the results of our work in peer-reviewed journals, blogs, and other outlets. Meanwhile, we've secured funding for exciting new projects in a number of areas: an expansion of our policy gap analysis to help additional countries meet their climate commitments; a study on climate change and migration; work to improve food security and resilience; an analysis of climate-related health effects; and an investigation into how the U.S. can promote efficient and equitable low-carbon growth, to name a few.

All of these projects have afforded students the opportunity to get involved as Research Assistants, and our doctoral Fellows to pursue specialized studies. Our faculty have had a busy year briefing American policymakers, the Federal Reserve Bank, a member of India's parliament, and countless others via Track II Dialogues and public webinars. We've shared our insights with the media, including the Wall Street Journal, Foreign Affairs, the Financial Times, the New York Times, and Reuters, among others.

We hope that you and your families are well and look forward to seeing you at some of the events we have planned for this fall.



Sincerely,

Handwritten signature of Jenny C. Aker in black ink.

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

Handwritten signature of Kelly Sims Gallagher in black ink.

Kelly Sims Gallagher
CIERP Co-Director
Director of the Climate Policy Lab
Academic Dean and Professor
of Energy & Environmental Policy

Research Funding and Partnerships

In 2020-2021, we secured \$1,939,100 in **new research funding** for the coming years from **9 private foundations, federal and state agencies, corporations, and individual donors**. We gratefully [acknowledge our supporters on our website](#).

Our network of partnerships continues to expand, including policymakers across the globe and numerous institutions. Over the past year, our partners included:

- Abdou Moumouni University
- CDP North America
- Council on Energy, Environment and Water
- Energy Innovation
- Ethiopia's Environment, Forest, and Climate Change Commission
- Greentown Labs
- Harvard Kennedy School
- Massachusetts Bay Transportation Authority
- Niger's Ministry of Education
- Niger's Ministry of Environment
- Sahel Consulting
- Tsinghua University
- University of California, Santa Barbara
- University of Diffa
- Winrock International
- Woodwell Climate Research Center

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Research News: Climate Policy Lab

- The Climate Policy Lab (CPL) relaunched its website at climatepolicylab.org, including comprehensive [national climate policy inventories](#) for the **United States, China, India, and Ethiopia**. The Chinese inventories were developed in conjunction with the paper on Chinese overseas investment policy highlighted on the next page.
- CPL research contributed to the rescue of the global institution, **Mission Innovation (MI)**, through policy briefings, media outreach, and [publication of a key article in Nature Energy](#) that highlighted how MI had contributed to low-carbon innovation and cost reductions. This article was based on research conducted by Zdenka Myslikova and Kelly Sims Gallagher, who was invited to present the research and policy recommendations during the live ministerial meeting where renewal of MI was decided.
 - ▶ [online](#)
- CPL is embarking on a [multi-country climate policy gap analysis](#) to analyze for key countries whether or not their existing climate policies are adequate for meeting their initial commitments under the Paris Agreement, and how new and additional policies could enable them to set more ambitious targets. In a related effort, CPL will study the [role of state enterprises in decarbonization](#).
- A new CPL project examines [low-carbon US stimulus energy policy](#) in terms of efficacy, job creation, social and geographic equity and inclusion.
- CPL began country case studies on the determinants of [overseas Chinese financing for renewable energy](#). The cases we are investigating include Argentina, Bulgaria, Chile, Ecuador, Lesotho, Romania, Ethiopia, Kenya, and Pakistan. This work follows on [published research on the financing of coal-fired power plants in four other countries](#). We are also investigating how the Belt and Road Initiative has affected domestic firms in China.

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Explore our different projects on the new CPL site.



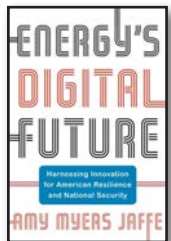
Find data on climate policies in our inventory

Kelly Sims Gallagher presenting at the Mission Innovation Roundtable, May 2021

Continued on next page

Research News: Climate Policy Lab *continued*

Featured Publications:



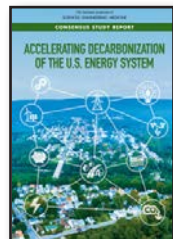
Amy Myers Jaffe published her book, *Energy's Digital Future: Harnessing Innovation for American Resilience and National Security*, with Columbia University Press.



Kelly Sims Gallagher and **Qi Qi** published "*Chinese Overseas Investment Policy: Implications for Climate Change*" in the journal *Global Policy*, and released the associated [climate policy database](#) on the CPL website. A [CPL blog post](#) summarizes their findings.

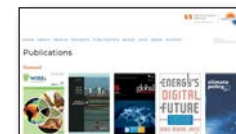


Rishikesh Bhandary, **Kelly Sims Gallagher**, and **Fang Zhang** published "*Climate Finance Policy in Practice: A Review of the Evidence*" in *Climate Policy*, which is the journal's second-most downloaded article in 2021 so far.



Kelly Sims Gallagher co-authored a report on "*Accelerating Decarbonization of the U.S. Energy System*" with the National Academies of Science, Engineering, and Medicine.

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See [Climate Policy Lab's searchable publication index](#) for more.





Research News: Joint Research

- CPL is collaborating with Professor Jenny Aker (CIERP, Fletcher), Professor Timothy Griffin (Friedman School of Nutrition Science and Policy), Woodwell Climate Research Center (WCRC), and the Council on Energy Environment and Water (CEEW) in New Delhi, to study the impacts of **Community-Based Natural Farming (CBNF)** on carbon sequestration, income, productivity, and resilience in India. [▶online](#)
- Together with Fletcher's Leir Institute and Woodwell Climate Research Center, CPL is studying the impact of **climate change on several inland African cities**, including a focus on migration. [▶online](#)
- Professor Barbara Kates-Garnick and CIERP affiliate faculty member Eric Hines have been active connecting research to policy on the development of offshore wind transmission. Together with a group of students and other faculty, they submitted comments to the **Federal Energy Regulatory Commission** and the NJ Board of Public Utilities.

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Read the document submitted by the Power Systems and Markets Group to the FERC.

Research News: Technology and Development

- Professor Jenny Aker received a new grant to support work on Girma, a development project carried out by Catholic Relief Services (CRS) in Niger and financed by Food for Peace / USAID to study, **improve, and sustain food and nutrition security and resilience among vulnerable households** and communities.
- Partnering with Niger's Ministry of Education, Jenny Aker's ongoing research investigates the **effects of monitoring phone calls** on teacher attendance and student learning in rural primary schools.
- Another ongoing study focuses on the **adoption of rainwater-harvesting techniques in Sahelian West Africa**, which have the potential to increase agricultural yields in the face of low and erratic rainfall, reversing land degradation and combating desertification. Recent work studies the impacts of training on the adoption of this technology.

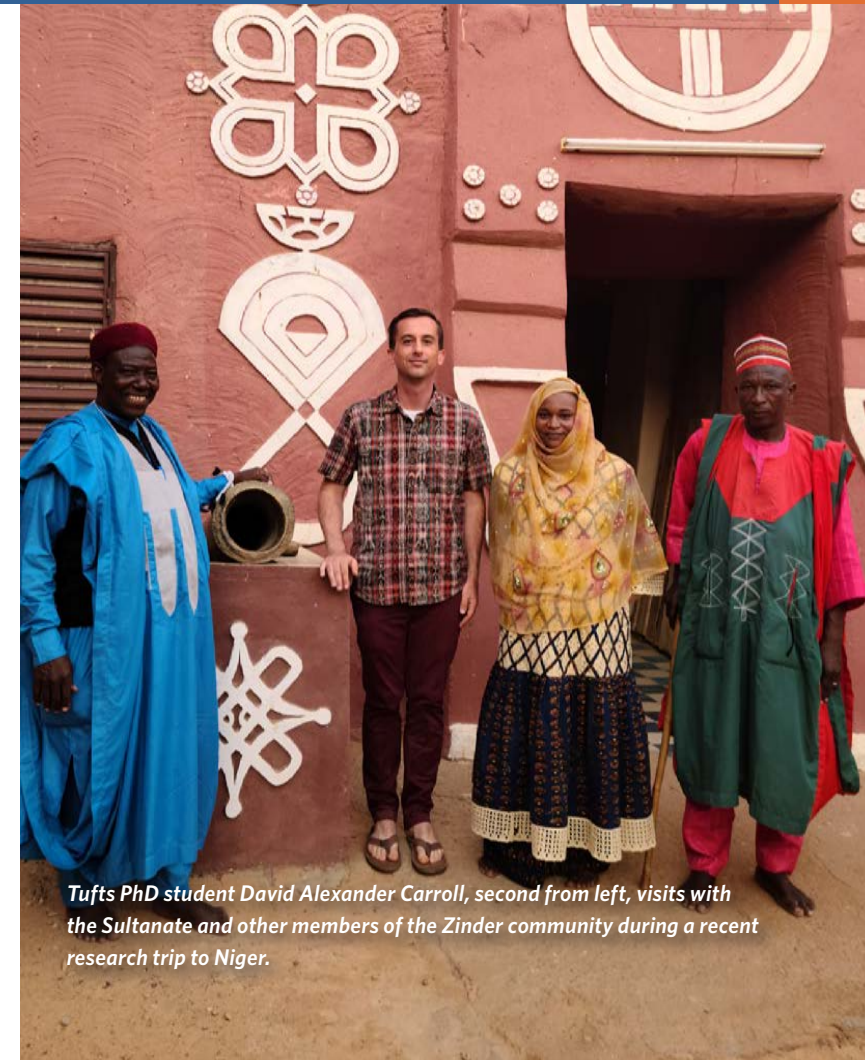
Featured Publications:



Jenny Aker co-authored [“Paying for Digital Information: Assessing Farmers’ Willingness to Pay for a Digital Agriculture and Nutrition Service in Ghana”](#) in the journal *Economic Development and Cultural Change*.



Jenny Aker and Christopher Ksoll authored the VoxDev article [“How simple technologies can improve learning: Evidence from Niger.”](#)



Tufts PhD student David Alexander Carroll, second from left, visits with the Sultanate and other members of the Zinder community during a recent research trip to Niger.



Research News: Water Diplomacy

- Professor Melissa McCracken started a new collaborative project on conflict and cooperation dynamics of transboundary dams. This is a collaborative project with the University of Geneva, IHE-Delft, and East Carolina University, along with several non-academic partners.

Featured Publication:

Melissa McCracken authored the book chapter “A Global Water Solution: An Example of the Sustainable Development Goal Target 6.5” in *Resolving Water Conflicts Workbook* edited by Lynette de Silva and Chris Maser.

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Explore Professor
McCracken's website.



Research News: Climate and Health

- Professor Shinsuke Tanaka contributed to a paper estimating the causal effects of long-term exposure to air pollution emitted from fossil fuel power plants on adult mortality. The authors leverage quasi-experimental variation in daily wind patterns, which is further instrumented by the county orientation from the nearest power plant. They find that the average county's fraction of days spent downwind of plants within 20 miles in the last 10 years is associated with increased mortality from COVID-19 through 2020. This effect is more pronounced in fence line communities with high poverty rates, low health insurance coverage, and low educational attainment.

Featured Publication:

The preprint of Shinsuke Tanaka's article on ["Long-Term Downwind Exposure to Air Pollution from Power Plants and Adult Mortality: Evidence from COVID-19"](#) is available online.

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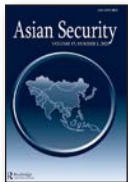


Explore Professor Tanaka's website.



Research News: Rising Power Alliances

- This project addresses the nature and reach of rising power alliances strategically seeking to reform the U.S.-led global order, especially the BRICS countries (Brazil, Russia, India, China and South Africa). Led by Professor Mihaela Papa, the team published three peer-reviewed journal articles this past year on alliances and have a book under contract with Cambridge University Press. The researchers also created an original BRICS policy convergence index of 2,000 observations of BRICS cooperation, and have a journal article under review to accompany this index. ► [online](#)



Featured Publications:

Zhen Han and Mihaela Papa authored "[Alliances in Chinese international relations: Are they ending or rejuvenating?](#)" in the journal *Asian Security*.

Frank O'Donnell and Mihaela Papa authored "[India's multi-alignment management and the Russia-India-China \(RIC\) triangle](#)" in the journal *International Affairs*.

Christopher Williams and Mihaela Papa authored "[Rethinking "Alliances": The Case of South Africa as a Rising Power](#)" in the journal *African Security*.

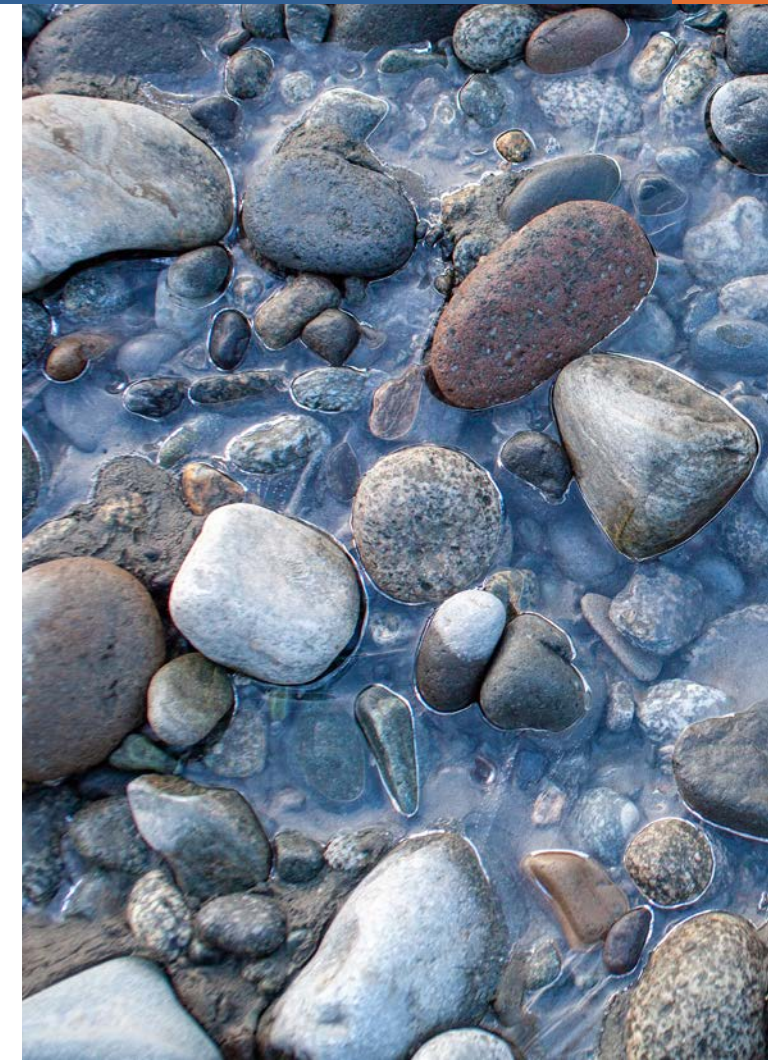
Featured Faculty Accomplishments

- **Jenny Aker** became an affiliate of the [Bureau of Research and Economic Analysis of Development \(BREAD\)](#) and the co-chair of DigiFI, a JPAL initiative at MIT.
- **Melissa McCracken** was invited to be a guest member of the Expert Group advising on the Handbook on Transboundary Water Allocation being drafted by the [UNECE Water Secretariat](#). She also contributed to their Handbook, which will be finalized in the fall.
- **Kelly Sims Gallagher** served as an expert reviewer for the 6th Assessment Report of the [Intergovernmental Panel on Climate Change \(IPCC\)](#). She also joined the Policy and Impact Committee of [Carbon Mapper](#).
- **Barbara Kates-Garnick** joined the [Resources for the Future](#) Board of Directors.
- **Amy Myers Jaffe** and **Kelly Sims Gallagher** provided numerous briefings to American policymakers on Capitol Hill and at the Federal Reserve Bank.
- **Amy Myers Jaffe** joined the International Advisory Board of the top ranking Elsevier journal [Energy Policy](#). She also taught an executive seminar at National Defense University on Climate Change and Energy Security Challenges in summer 2021.
- **Rachel Kyte** served as advisor to the UN Secretary-General on climate action and advisor to the UK as a Friend of COP26. She also served as co-chair of the Advisory Council for a framework for sustainable finance integrity. In May 2021, she was appointed co-chair of the Voluntary Carbon Markets Integrity Initiative. She was a witness at the House committee on Foreign Affairs on [Green Recovery Plans](#) for the COVID-19 Crisis in September 2020 and [Climate: Restoration of the Transatlantic Dialogue: The Global Fight Against Climate Change](#) in April 2021.

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See all of our affiliated faculty on our website.





Completed Doctoral Work

Easwaran J. Narassimhan successfully defended his dissertation, "Green Industrial Policy: A Delicate Dance Between Socio-Economic and Environmental Objectives," on April 27, 2021. His thesis elucidates the policies and governance models needed for countries at different stages of development to transition to a green economy while also creating employment. Dr. Narassimhan is now a joint Postdoctoral Scholar at the Climate Policy Lab and the Belfer Center's Science, Technology, and Public Policy Program at Harvard Kennedy School.

[L-R] Kelly Sims Gallagher and Easwaran Narassimhan stand outside of The Fletcher School after Easwaran's successful defense.

Easwaran Narassimhan delivering his dissertation defense at The Fletcher School.

Kelly Sims Gallagher hooding Easwaran Narassimhan at The Fletcher School commencement.



CIERP students, faculty, and staff gather to celebrate graduation in May 2021.



[L-R] Kelly Sims Gallagher, Sabrina Rose, MALD '21, and Fletcher Dean Rachel Kyte at The Fletcher School Commencement.

Students

50 students employed at CIERP

123 graduating students took at least 1 environment or development course

27 graduating students took 3 or more environment or development courses

26 graduating students were advised by CIERP faculty on their capstones

Much of our student support is **made possible by your generous gifts**. These funds allow us to support an internship program, student-organized events, and travel grants for experiential learning. [▶ online](#)

Alums



After graduating from Fletcher, **Eliza Sheff, MALD '21** became a Senior Analyst on the International Climate and Energy Team at Cadmus Group. She primarily works on energy resilience projects for Small Island Developing States in the Caribbean and the Pacific, while also assisting with domestic projects surrounding energy and electricity regulations and climate adaptation planning.

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Read Eliza's full update and learn about other alums on our website.

Outreach and Impact

23 events, all virtual

8,596 [CIERP website](#) visitors (compared to 6,162 last year)

7,100 [Climate Policy Lab website](#) visitors (compared to 1,876 last year)

245k Twitter impressions for @CIERP_Fletcher

1397 [Twitter followers](#); 874 [Facebook followers](#); 146 [LinkedIn followers on our brand new page](#)

Of note:

- The [CPL Community Voices blog](#) included special contributions connecting students and alums for Black History Month, Asian American and Pacific Islander Month, and Pride Month.
- The [CPL Climate Smart blog](#) was created to feature high level evidence-based climate policy analysis.

Media mentions in global outlets including the Wall Street Journal, Foreign Affairs, Financial Times, New York Times, and Reuters. Prominent media mentions:

- [Amy Myers Jaffe wrote an article in Foreign Affairs](#), "Electricity Is the New Oil: A U.S. Strategy for the Post-Hydrocarbon World."
- [Amy Myers Jaffe penned an article in the Wall Street Journal](#), "The Electrification of Everything: What You Need to Know."
- [Kelly Sims Gallagher wrote an op-ed in The Hill](#), "The US needs a US climate law."



Kelly Sims Gallagher moderates a discussion between Fletcher Professor Susan Landau and Amy Myers Jaffe on the Colonial Pipeline ransomware attack.

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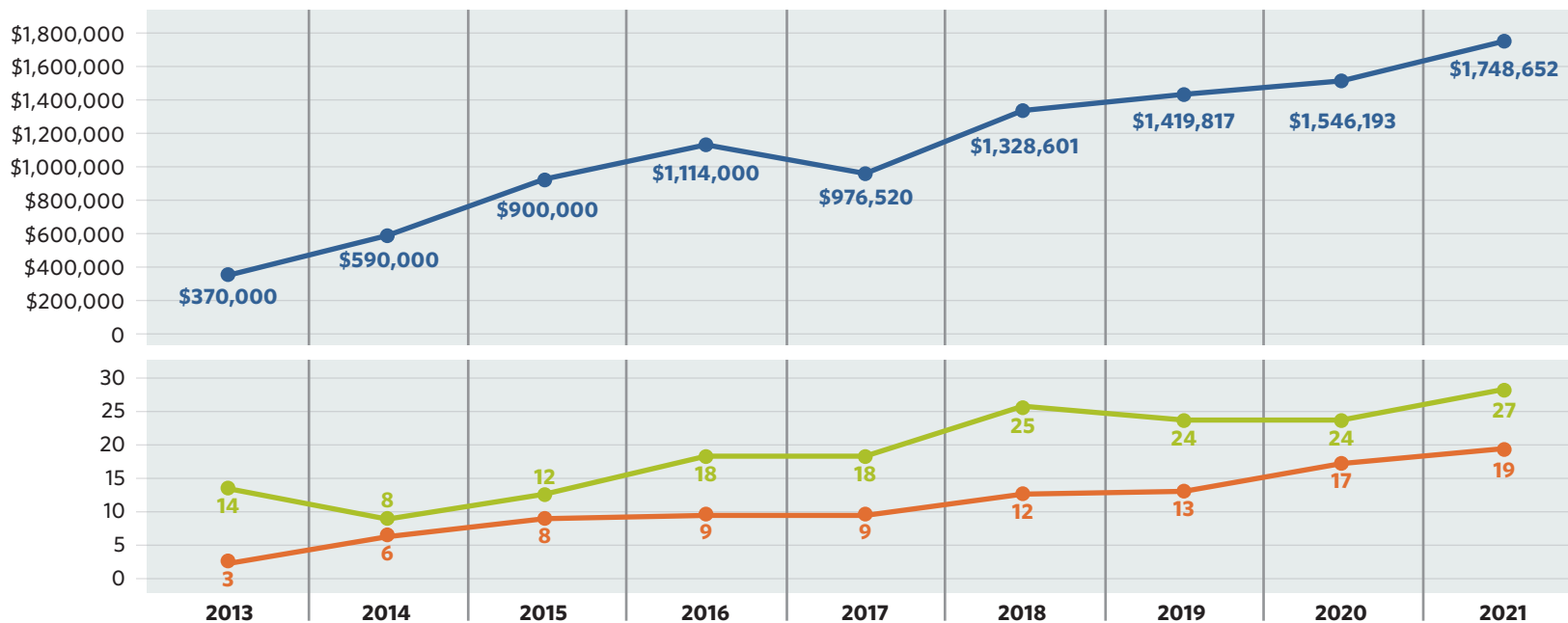
Climate Smart blog



Community Voices blog

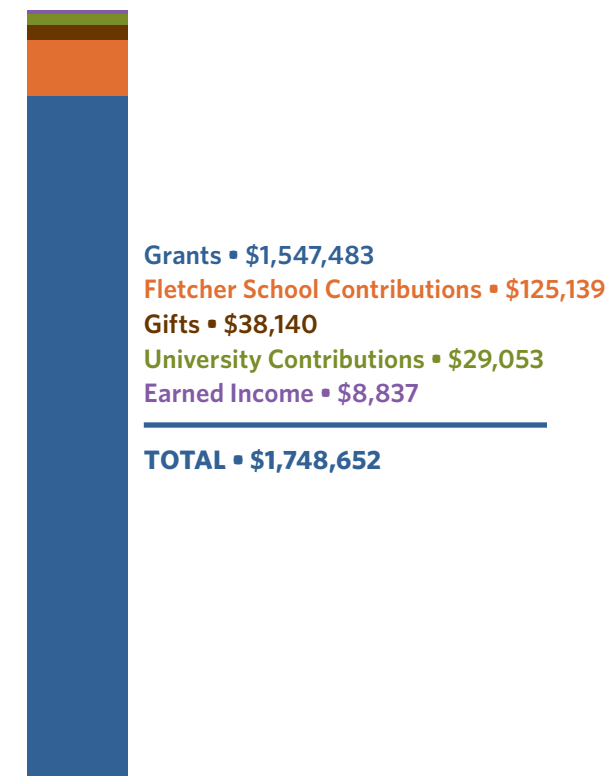
Finances in Review

Annual Center Growth by Fiscal Year




■ Total Expenditures
■ Affiliated Faculty
■ Active Grants


Total Expenditure by Funding Source FY21




Staying Connected

Thank you to the many supporters of CIERP and the Climate Policy Lab who make our work possible. Please connect with us to hear about our latest work and send us your own updates!

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