



Environmental
Innovations Initiative
UNIVERSITY *of* PENNSYLVANIA



2024-2025 ANNUAL REPORT



About the Environmental Innovations Initiative

Launched in 2020 by then-President Amy Gutmann and then-Provost Wendell Pritchett, the Environmental Innovations Initiative, part of the Office of the Vice Provost for Research, leveraged Penn's considerable academic strengths to meaningfully address the critical environmental challenges of our time. EII marked its five-year anniversary in early 2025 and became integrated into Penn Climate late in the year.

MISSION

To convene and catalyze interdisciplinary scholarship and education that addresses environmental and climate challenges.

VISION

To cultivate a community of knowledge and action in environmental stewardship by uniting scholars, practitioners, students, and partners to create a thriving world for all.



Cover Photo: Locust Walk bustles with life during Climate Week at Penn.

Credit: Tommy Leonardi

Photos, this page, upper section, clockwise from top left:

Faculty and trainees gather for a meeting of the Extreme Heat Working Group.

Credit: EII

Building bat boxes during Climate Week helped to support local bat populations.

Credit: Tommy Leonardi

Fernanda Jimenez and Carolina Angel Botero represented Penn at COP16.

Credit: Fernanda Jimenez

Julie Ellis presents a Climate 101 session on Climate Change and Wildlife Health.

Credit: EII

Karen Verderame of Penn Vet lets students get hands on with insects during Climate Week.

Credit: Tommy Leonardi

Photo this page, at left:

Penn Board Chair Ramanan Raghavendran speaks with Professor Michael Weisberg at Climate Week's How to be a Climate Leader. Credit: Tommy Leonardi

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Climate Week BioBlitz participants examine a crustacean found in Kaskey Park. Photo: Tommy Leonardi

The Climate Week Poster Session showcases student and faculty work in climate and environment. Photo: Katie Baillie

Ell's Biodiversity Working Group focuses on halting and reversing biodiversity loss. Photo: Kate LaSpina

Professor Simon Richter (center) and Penn Vet's Sam Ngyuen (front left) and Dean Andrew Hoffman (front right) enjoy a Climate Week event. Photo: Tommy Leonardi



LETTER FROM OUR FACULTY DIRECTORS

The 2024-25 academic year marked the fifth anniversary of the Environmental Innovations Initiative, and a time of transition; as of this writing in December 2025, the EII team and programming has joined the Office of the Vice Provost for Climate Science, Policy, and Action, or Penn Climate, marking a major milestone on our journey. As evidenced by this report and our contributions since launching in 2020, we have much to look back on with pride.

The work of our Research Communities, Faculty Fellows, students, staff, and many partners has addressed a range of critical issues – creating novel building materials, promoting regenerative agriculture, expanding climate education, and much, much more. These efforts have linked research, education, and action, making a difference across campus, our city, and the world. EII's mission to connect, support, and extend critical interdisciplinary

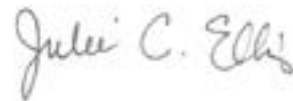
research and education made our work at Penn more than the sum of its parts.

EII forged powerful connections that continue to enrich our scholarly community. This collaborative spirit enabled faculty and students to break out of their disciplinary silos to seek solutions to the complex challenges posed by climate change and other environmental issues.

Now integrated into Penn Climate, we are confident that our foundational efforts will continue to serve the university and drive impactful change. Although EII existed for less than six years, the growth we witnessed is truly remarkable: new colleagues, new support, and new ideas to confront ever-pressing challenges. We are eager to begin this next chapter and look forward to what lies ahead for Penn Climate.



Kathy Morrison, Faculty Director



Julie Ellis, Interim Faculty Director



Kathleen D. Morrison, PhD, is the Sally and Alvin V. Shoemaker Professor of Anthropology, curator in charge in the Asian Section at the University of Pennsylvania Museum of Archaeology and Anthropology, director of the Penn Paleoeology Lab, and faculty director of the Environmental Innovations Initiative. Her research focuses on anthropogenic changes in land use and land cover at local, regional, and global scales. Current projects include LandCover6k, a global database of Holocene land use and land cover, and South Indian Landscape Trajectories, an analysis of the last 5,000 years of farming, food, and power, and their connections to environmental change in the semi-arid regions of peninsular India.

Julie C. Ellis Ph.D. is an adjunct associate professor of pathobiology, a senior research investigator, and associate director of One Health at Penn. Prior to joining the Penn faculty, she established the Northeast Wildlife Disease Cooperative, a network of institutions that provides diagnostics services and other expertise to fish and wildlife agencies in 10 states. Julie is serving as Interim Faculty Director of EII for the 2025-26 academic year, and previously was an EII Faculty Fellow and a member of the Climate Week at Penn core organizing committee.



ACADEMIC CLIMATE COMMITMENTS

Academic inquiry at Penn is spread across its 12 Schools, four of which offer undergraduate degrees and all of which offer graduate degrees. While each of these Schools is dedicated to specific disciplines, there is a shared commitment to collaboration, impact, and the integration of knowledge across the disciplines. The Environmental Innovations Initiative collaborated with the leadership of each of Penn's 12 Schools to issue a set of distinct [Academic Climate Commitments](#) that reflect the scholarly priorities of each school, identify opportunities for advocacy within industries and communities, and draw connections between

the School's activities and Penn's commitment to be carbon neutral by 2042. Launched during Climate Week at Penn 2022, each of these public-facing commitments has its own priorities, aspirations, and even formatting. These unique elements are essential to establishing statements that are authentic to the strategic vision of the School while advancing a united sense of purpose for Penn's teaching, research, and service. In the following pages, we share the progress made on these commitments during the 2024-25 academic year.

All building photos courtesy of University of Pennsylvania.



College Hall

School of Arts & Sciences

With a wide-ranging portfolio of climate-related scholarship, the School of Arts & Sciences accelerated its contributions in 2024-25. A dedicated website, [Climate@SAS](#),

showcases faculty, research and education programs, and news and events related to climate change, in alignment with the School's strategic priorities. Faculty hiring connected to climate change and sustainability has attracted scholars with expertise in climate science, ecology and evolution, and energy sustainability to campus. The Plant Adaptability and Resilience Center marked its official opening and is working to promote interdisciplinary scholarship to ensure our planet's food security and biodiversity. And, together with Penn Engineering, the School celebrated the opening of the Vagelos Laboratory for Energy Science and Technology to propel new interdisciplinary innovation, earning LEED Platinum certification, underscoring Penn's commitment to sustainable design and construction.



Huntsman Hall

The Wharton School of Business

In 2025, the Wharton Impact, Value, and Sustainable Business Initiative (Wharton Impact) funded 15 faculty and 4 doctoral students to conduct \$156,400 of independent research, in addition to initiating \$200,000 of new sponsored research. Over 30 Wharton researchers accessed the Impact data warehouse, and Wharton Impact employed 37 Research Assistants. 40 MBAs graduated with an ESG major, making it the 8th most popular

major in the School. One hundred forty-one students, spanning eight of the 12 schools at Penn, were selected from a group of 352 applicants to participate in rigorous and highly engaging co-curricular programs that train students for careers in investing, consulting, and nonprofit work. After completing their programs, over 80% of students reported that they were likely to pursue careers that similarly focused on impact and sustainability, and over 90% of students would likely recommend their program to peers. In addition to on-campus engagement, 562 students from 49 other universities participated in two year-long impact investing competitions sponsored by Bobby Turner, W'84, one of which resulted in a \$50,000 investment into ReJoule, an innovative battery diagnostic company. Finally, in its 20th year, the John M. Bendheim Loan Forgiveness Fund provided student loan forgiveness to an additional 15 Wharton MBA alumni leaders in the field of social impact. Wharton Impact has published four new research primers that synthesize research findings for practitioners, and continues to see robust attendance and engagement at its convenings and events.



Annenberg School for Communication

The Annenberg School for Communication

Building on the momentum of previous years, research and education on climate change at the Annenberg School for Communication expanded in new directions in 2024-25.

A research group at Annenberg collaborated with other institutions to launch the Science and Community Impacts Mapping Project, an interactive map of the United States that tracks the economic impact of cuts to federal research grants at the national, state, and county level. Faculty in Annenberg's Climate Communications Division led a graduate-level academically based community service course on youth participatory action research in which Philadelphia high school students investigated solutions to urban heat and greening as well as scholarship on communication strategies that underlie and motivate environmental action. In addition, The Center for Science, Sustainability, and the Media held its first Research Day to highlight progress in communications science.



Evans Building Schattner Clinic

School of Dental Medicine

Penn Dental Medicine is committed to furthering aspirational global oral research and practice priorities that include prioritizing dental technologies that reduce our carbon footprint

and promote sustainability; modeling care routines that integrate sustainability principles in oral health services, and collaborating with the environmental scientists and cross disciplinary colleagues to develop and disseminate new ways of thinking and working in a changing world.

To this end and through our Center for Integrative Global Oral Health, PDM organized the 4th Global Oral Health & Climate Action Conference offering online programs from November 10-21 in conjunction with the COP 30 Climate Conference in Brazil. More than 20 one-hour webinars with academic experts, policy makers and oral health professionals from around the world were recorded and are available on reprise [here](#).



Charles Addams Fine Arts Hall

The Weitzman School of Design

Climate and sustainability practice and scholarship is suffused throughout the work of the Weitzman School of Design, with remarkable expressions during the 2024-25 academic year. Research in sustainability materials and building design advanced, with exhibitions, installations, and pilots taking place in locations around the Philadelphia area and beyond.

The McHarg Center for Urbanism & Ecology hosted impactful events, such as a gathering around Architectures and Ecologies of Amazonia, while PennPraxis contributed to climate leadership training and climate resilience planning in Camden. PennPraxis also partnered with Penn Vet at New Bolton Center to advance regenerative agriculture, and the Center for Environmental Building Design developed a greenhouse gas (GHG) emissions assessment, or carbon footprint, in support of the University of Pennsylvania Health System's first climate and sustainability action plan.

The Polyhedral Structures Lab unveiled a new 3D-printed, high-efficiency building structure at the Venice Architecture Biennale, and the Kleinman Center for Energy Policy marked its tenth anniversary, continuing to lead in its work as a renowned hub for research-backed policy and education on the energy transition. The School launched an exhibition series featuring climate change adaptation and mitigation projects.



Graduate School of Education

Graduate School of Education

Penn GSE's Green Commitment Collaborative (GCC) brings together faculty and staff to advance climate initiatives. Formalized in early 2025, the GCC's goal in its first year was to jump from ideation into action, achieving tangible improvements in GSE's environmental sustainability. To that end, the group held a successful e-waste recycling drive in October, which collected 74 electronic devices as well as many miscellaneous gadgets, cords and batteries. Building on momentum from waste-reduction practices implemented GSE faculty meetings last year, we are working to expand sustainability strategies at catered events

across the School. We have also implemented a K-Pod recycling project on GSE properties.

In early December, a School-wide resource sharing event helped faculty and staff recycle or donate surplus supplies and divert unwanted materials from landfill or incinerator waste streams. Planning is underway for the implementation of composting at a small scale in two of GSE's four buildings, and another e-waste recycling event is scheduled for late February 2026. In partnership with GSE's digital communications team, the GCC is establishing a web presence which will help us share resources, communicate progress and capture latent community interest. The GCC is brainstorming ideas for an Earth Week greening effort (such as a tree planting or litter collection event) and planning a zero-waste ice cream party to recognize community members who have engaged with our work. The group intends for these events to expand our coalition, including by offering opportunities for student involvement.

On the academic front, the Project-Based Learning for Global Climate Justice initiative continues to run with an updated new website to achieve their goals of informing educational climate policy and practice.



In a project led by Penn Vet professor Zhengxia Dou, the school partnered with a local fruit processing center to collect discarded citrus waste and incorporated it into cows' diets at the research dairy farm at New Bolton Center. This practice reduced landfill emissions, displaced standard feed ingredients like corn and hay, and still maintained milk yield and quality. Credit: Zhengxia Dou



Global cohorts of educators in six different countries participated in a real-time Global Design Sprint designing local climate justice projects in November 2024. This event was part of the Graduate School for Education's Project-Based Learning for Global Climate Justice initiative. Credit: Zachary Herrmann



Singh Center for Nanotechnology

School of Engineering and Applied Science

Penn Engineering's contributions to climate scholarship and education, as well as toward the University's sustainability goals, progressed dramatically in 2024-25. The School launched a new master's in Energy and Sustainability Engineering, which will welcome its first cohort in fall 2026. New faculty, including Lorena Grundy, Samantha McBride and Ali Zaidi, have expanded the School's research and teaching expertise in energy

and sustainability technologies and policy, augmenting Penn Engineering's existing strengths in sustainability materials, alternative fuels, carbon capture and more. Penn Engineering also celebrated the opening of two buildings constructed with environmental sustainability at the forefront of design, including Amy Gutmann Hall, the region's tallest mass timber building, which earned LEED Gold certification, and, in partnership with the Penn Arts & Sciences, the Vagelos Laboratory for Energy Science and Technology, which earned LEED Platinum certification. Looking ahead, the Big Ideas in Penn Engineering 2030, the School's new strategic plan, will produce pathbreaking research in Engineering Sustainable Infrastructure at the scientific frontiers of energy-efficient computing, advanced materials, environmental systems and AI. These projects, and their transformative potential, will position Penn Engineering to lead in building the resilient, low-carbon and circular infrastructure systems that are needed to meet and overcome global energy and climate challenges.



Silverman Hall

Penn Carey Law

During 2024-25, Penn Carey Law advanced scholarship related to climate, the environment, and sustainability, through practicums, centers, and individual faculty scholarship. The Penn Program on Regulation, led by Cary

Coglianesse, marked the 15th anniversary of its signature publication, *The Regulatory Review*, in which environmental and climate-related regulation are regularly explored by student and faculty contributors. Bill Burke-White represented Penn at the United Nations Climate COP in Azerbaijan, while Shelley Welton earned a MacCormick Fellowship from the Edinburgh Law School and delivered the Carnot Lecture on Designing Institutions for Clean Energy Justice. Four students availed themselves of externships, lending support at the U.S. Environmental Protection Agency and the Department of Justice, Environmental and Natural Resources Division. The student-run Environmental Law Project co-hosted programming on a Philadelphia Gas Works proposal that would limit public participation in local environmental policy development.



John Morgan Building

Perelman School of Medicine

After having successfully integrated climate-related material into the pre-clinical medical school curriculum, PSOM is working

to incorporate climate content into the clerkship curriculum. The school is also sharing information about Penn's Green Labs Program widely, targeting graduate students as change-makers to improve lab sustainability practices. Clinical faculty at the school continued to pursue pilot studies to improve health care sustainability, such as reducing red bag waste and the use of one-time-use materials in medical procedures.

The University of Pennsylvania Health System released its first Climate and Sustainability Action Plan, with a goal of halving carbon emissions by 2030 and achieving carbon neutrality by 2042. The plan also stipulates new, environmentally conscious standards for health system operations related to cleaning materials, food service, and product selection.



Claire M. Fagin Hall

School of Nursing

During 2024-25, the School of Nursing extended its efforts to build climate change knowledge into its research, teaching, and practices. They are developing a climate and nursing module to offer to students during

New Student Orientation. In Penn Nursing's Simulation Lab, students and faculty alike learn to reduce waste in practice and carry that out by cutting down on personal protective equipment in training scenarios. The School is also exploring the use of expired materials in the simulation lab to further save costs and waste generation.

Nursing faculty continued to facilitate the Climate and Health Education Working Group, leading to a collaboration across many offices at Penn to mentor PURM student in identifying opportunities for climate and health education on Penn's campus. And through the School's Climate and Innovation Committee, climate-related issues receive regular consideration, promoting elevation of sustainability practices and dissemination to the School community.



Caster Building

School of Social Policy & Practice

This year the School of Social Policy & Practice continued to leverage its expertise in social innovation to address the vulnerabilities and inequities that arise from climate change. SP2's new Center for Climate Adaptation & Resilience (CCAR) aims to make Penn a global

epicenter for climate resilience research and practice. With a focus on the often-overlooked social, economic, and psychological dimensions of climate adaptation and resilience, the Center's mission is to build evidence, tools, and coalitions that help governments, firms, workers, and communities adapt faster, more fairly, and at lower social cost. In 2024-25, SP2 faculty and students won research grants to address climate adaptation and energy insecurity, and to explore how nonprofits and philanthropic organizations can best support marginalized communities in the face of climate change's often unequal impacts. On the operational sustainability front, the school encourages staff to work from home, when possible, on Red Days, or the days of anticipated highest energy use, to cut down on building energy costs, reducing commuting-associated energy use and pollution production, and protect employees from the potential health impacts of extreme heat.



Hill Pavilion

School of Veterinary Medicine

During 2024-25, the School of Veterinary Medicine made significant strides toward advancing climate change research and education while also building resilience for climate's impacts through its operations and infrastruc-

ture. The school is exploring a solar energy project to be based on its New Bolton Center campus in Kennett Square, having completed a feasibility study and developed guidelines for implementation. Numerous faculty weave climate into their research portfolios, investigating new approaches to both mitigate carbon emissions and adapt to a changing climate, through regenerative agriculture practices, infectious disease research, and efforts to bolster food security.

Penn Vet is also leading the development of a One Health certificate and a new open-access portal for the sharing and use of pedagogical resources for climate change education. In addition, Penn Vet has begun work to create a school-level Climate and Sustainability Action Plan to help align its sustainability efforts with the university-wide *Climate and Sustainability Action Plan 4.0*.

TRANSDISCIPLINARY RESEARCH

WORKING GROUPS

EII launched two working groups to encourage collaboration and transdisciplinary scholarship during the 2024-25 academic year. The [Extreme Heat Working Group](#) brings together experts to enhance understanding and develop solutions to mitigate the harmful effects of heat on people, infrastructure, and ecosystems. During semesterly gatherings, members presented their research and held discussions focused on developing collaborative research questions and considered alignments with specific funding opportunities.



Faculty interested in studying extreme heat solutions gathered in May 2025 to meet colleagues and share ideas. Credit: EII

The [Biodiversity Working Group](#) explores values, patterns, trends, and threats to biodiversity as a means of envisioning pathways toward a sustainable future. Similar to the extreme heat group, this community, with expertise in ecology, conservation and restoration, sustainable agriculture, architecture and urban development, and policy and law, highlights the potential opportunities for collaboration to address and reverse biodiversity loss.

For both groups, to encourage cross-campus connection, EII published booklets that provide a snapshot of participants' areas of scholarship.

RESEARCH COMMUNITIES

EII supported its fourth cohort of Research Communities for the 2024-25 academic year, a suite of transdisciplinary, collaborative enterprises, selected from a competitive pool of applicants to address a common theme of broad environmental significance. In addition to welcoming three new research communities (*see sidebar below*), four were renewed.

[Cultivating the One Health@Penn Research Community](#)

– led by **Jenni Punt**, associate dean of One Health and professor of immunology in Penn Vet (2nd Year)

[Penn Regenerative Agriculture Alliance](#) – led by **Tom Parsons**, professor of swine production medicine in Penn Vet (3rd Year)

[Project-Based Learning for Global Climate Justice](#) – led by **Zachary Herrmann**, adjunct associate professor in the Graduate School of Education (3rd Year)

NEW

Research Communities

Catalyzing Nature-Based Solutions to Address Urban Water Challenges in Philadelphia Communities

led by **Howard Neukrug**, professor of practice of earth and environmental science in the School of Arts and Sciences and executive director of the Water Center

Global Climate Impacts, Risks and Vulnerabilities

led by **Irina Marinov**, associate professor of earth and environmental science in the School of Arts and Sciences

How private actors build societal resilience to environmental crises

led by **Katherina Rosqueta**, adjunct faculty in the School of Social Policy and Practice and executive director of the Center for High Impact Philanthropy

[Public Deliberation on the Co-Benefits of Climate Transition Policy](#) – led by **Steven O. Kimbrough**, professor of operations, information, and decisions in The Wharton School, and **Rand Quinn**, associate professor in the Graduate School of Education (2nd Year)

FACULTY DATABASE

Committed to sharing knowledge and fostering collaboration, EII is improving the [Faculty Database](#) by leveraging new tools, algorithms, key words, and databases. We are refining our methodology to showcase and enable interdisciplinary research addressing climate and environmental challenges.

FACULTY FELLOWS STUDENT RESEARCH

EII offers funding to its Faculty Fellows to hire student research assistants, a mutually beneficial program whereby students contribute to the fellows' scholarship and, in turn, receive mentorship, training, and the opportunity to work on meaningful projects. In 2024-25, EII funded students to work on a variety of projects:



Alan Li supported research led by Jon Hawkings to monitor water quality in Cobbs Creek.

- **Alan Li** supported work that Fellow **Jon Hawkings** led in Cobbs Creek to implement a water quality monitoring program.
- **Petra de Beer** worked with Fellow **Emily Falk** to explore how news framing influences the brain to drive engagement and memory formation related to climate change.
- **Stuti Mankodi** helped develop learning modules for the Project-Based Learning for Global Climate Justice initiative led by Fellow **Zachary Herrmann**.

- **Doer He** supported Fellow **Heather Huntington**'s efforts to conduct an analysis for Latin America and the Caribbean to understand the land use requirements necessary to meet climate commitments in that region.



Support from the PPA Renewable Energy Research Program is being used to assess stormwater runoff at central Pennsylvania solar energy facilities.

RENEWABLE ENERGY RESEARCH

The Power Purchase Agreement (PPA) [Renewable Energy Research Program](#), supported by energy company AES, provided funds to develop three research projects in 2024-25, including on-the-ground research on soil health, carbon storage, and stormwater management on the PPA solar array sites in Central Pennsylvania. (See the sidebar below for project details.)

Power Purchase Agreement (PPA) Renewable Energy Research Program

Understanding Carbon Tradeoffs in Site Design for Photovoltaic Arrays: Comparison of Solar Photovoltaic, Agricultural Cropping, and Agrivoltaic Arrangements

Project team: **Nicholas Pevzner** of the Weitzman School of Design, **Alain F. Plante** of the School of Arts & Sciences, **Peter Psarras** of the School of Engineering and Applied Science, **Stephanie Carlisle** of the Weitzman School of Design, and **Jie Ying**, a dual-degree student in the Master of Environmental Studies and Master of Landscape Architecture programs

Evaluating Stormwater Runoff at UPenn's Solar Project in Central Pennsylvania

Project team: **Ellen Kohler**, **Brenton McCloskey**, and **Emma Denison** of the Water Center at Penn in the School of Arts & Sciences

Shine On Pennsylvania: Assessing Community Acceptance of Large-Scale Solar Projects

Project team: **Nicholas Kwok** and **Sandro Mocchiolo** (undergraduate students), advised by **Jon Hawkings** and **Parrish Bergquist** of the School of Arts & Sciences

TRANSFORMATIVE EDUCATION

COURSE INVENTORY

EII supports models for transformative education that ensure all Penn students have the opportunity to learn about their capacity as changemakers. For this purpose, we curate a [list of environment-related courses](#) every year, cross-checked with academic units. We advertise the course inventory through print and social media, and keep track of student enrollment in these courses with support from the offices of the University Registrar and Institutional Research & Analysis. In 2025, we created a new tag for Experiential Learning to pinpoint courses in which students accrue and apply environmental knowledge through travel, field trips, and laboratory experiences.

CLIMATE AND HEALTH EDUCATION WORKING GROUP

EII is a founding member of CHEWG, a group of scholars from across Penn who gather to dialogue and create resources related to education for planetary health, climate change, and sustainable health and social care. During 2024-25, EII staff worked with CHEWG members to mentor a group of three students, with support from the Penn Undergraduate Research and Mentorship office, who conducted a study of Penn's



Veronica Baladi and Wendy Hernandez Higareda conducted fieldwork in Houston Hall this summer, noticing signage and taking air quality readings. Credit: Eric Sucar

333

COURSES

environment-related courses available to undergraduate and graduate students at Penn during the 2024-25 academic year

4,246

STUDENTS ENROLLED

students enrolled in environment-related courses during the 2024-25 academic year

campus to identify opportunities to provide educational opportunities related to the intersection of climate change and health.

Another CHEWG partnership supported the development of [Penn Climate Insights](#), an open platform for sharing teaching resources about climate change, which launched in fall 2025.

STUDENT GROUPS

EII launched its first Student Advisory Committee to deepen student engagement and integrate student perspectives into sustainability efforts. Representing diverse graduate and undergraduate backgrounds, members helped raise program visibility, advised on student priorities, and supported outreach through event tabling and strategic input for major initiatives like Climate Week and Earth Week.

EII provided financial, logistical, and programmatic support to student groups, including [Climate Leaders at Penn](#), a graduate student club. With community partners, CL@P hosted:

- Welcome dinner
- Masterclass 1
- Thanksgiving social
- Energy Week panel
- Earth Month x Sierra Club panel
- Final Capstone Presentations

[EnviroLab](#) is a graduate student-led community dedicated to supporting research on the interface of the environment and society. This group organized job talks, grant-writing workshops, and a talk (jointly sponsored with EII) by [Dr. Megnaa Mehtta](#) of the University College London Institute of Risk and Disaster Reduction.



Second year engineering student Ngaatendwe Manyika demonstrates a model representing her work in the ISAC program with Prof. Lorena Grundy. Credit: Bianca Swift

ISAC

Since 2012, the [Integrating Sustainability Across the Curriculum](#) (ISAC) program has supported Penn instructors in incorporating environmental and sustainability themes into new and existing courses. ISAC provides funding for graduate and undergraduate research assistants who work directly with faculty to develop or revise syllabi, lectures, assignments, readings, and assessments that integrate sustainability concepts. In summer 2024, seven students collaborated with six faculty members to enhance their courses; in summer 2025, three students worked with five faculty members. (See table of ISAC-supported courses, students, and faculty at right.)

Integrating Sustainability Across the Curriculum

2024

- **ARCH3010: Design I**
Elizabeth Lovett, SAS, Architecture
Yudi Dong, Environmental Building Design
- **COMM3450: Adolescence and Media**
David Lydon, Annenberg School for Communication
Priya Bhavikatti, Economics & Visual Studies
- **DSGN 3250: MATTERS: Connecting Arts + Design to Materials, and Materials to Labor + Land**
Kaitlin Pomerantz, Weitzman School of Design
Priya Bhavikatti, Economics & Visual Studies
Shay Meyerson, Social Work, Fine Arts
- **INTS 5120: The City Paradox: Design, Innovation, and Leadership**
Sudev Sheth, Wharton, The Lauder Institute
Christian Butts, City Planning
- **LALS 3020: Diplomacy in the Americas - the Penn Model OAS Program**
Catherine Bartch, SAS, Center for Latin American/Latinx Studies
Christian Butts, City Planning
- **VSCN 6570: One Health and Global Food Security**
Brianna Parsons, School of Veterinary Medicine
Bobbi-jo Katagiri, Penn Vet

2025

- **EAS2XXX: Energy Technology, Sustainability, and Policy Grand Challenges in 2030 and Beyond**
Russell Composto, Engineering, Material Science and Engineering.
Ngaatwndwe Manyika, Engineering
- **ENGL3353: Advanced Nonfiction Writing: XFic**
Jay Kirk, SAS, English.
Nat Glasgow, SAS
- **ENGR5XXX: Renewable Energy Technologies Lab**
Lorena Grundy, Engineering, Chemical and Biomedical Engineering.
Ngaatwndwe Manyika, Engineering
- **URBSXXXX: Urban Schools and Neighborhood Change**
Julia McWilliams, SAS, Critical Writing.
Nat Glasgow, SAS
- **URBSXXXX: Urban Climate Policy and Action**
Julia McWilliams, SAS, Critical Writing.
Phoebe Cunningham, PSOM
- **XXXX: Master of Public Health Curriculum**
Hillary Nelson, MPH Program Director
Phoebe Cunningham, PSOM

CONNECTIONS



EII, Perry World House, and the Kleinman Center for Energy Policy hosted Ali Zaidi, former White House National Climate Advisor, for a 'fireside chat' with Time Senior Correspondent, Justin Worland in December 2024. Photo: Katie Baillie

EVENTS

Co-Sponsored Events

Through webinars, panel discussions, and fireside chats, EII helped spread the word about timely research and information on environmental justice, climate change, and research and educational opportunities, bringing together the Penn community with interdisciplinary conversation and outreach. [A few of these were:](#)

- Panel: *How is the World Working to Save Biodiversity*, with the Penn Center for Latin American and Latinx Studies
- Fireside chat: *Global Competitiveness, Domestic Prosperity, and the Climate Throughline*, with Perry World House and Kleinman Center
- Webinar: *University-Community Partnerships for Equitable Landscapes and Environmental Justice*, with Penn Sustainability and the Netter Center for Community Partnerships
- Webinar: *The suspension of U.S. foreign aid and the future of international development series*, with Penn Development Research Initiative and other offices
- Webinar: *Safeguarding environmental rights amid political shifts: US and Australian perspectives*, with the University of Melbourne

Climate Week 2024

Climate Week at Penn returned for the fifth time from Oct. 14-18, 2024, with partners across the University holding more than 50 in-person and virtual events ranging from lectures and panel discussions to hands-on activities, tours, and networking events. Highlights included a "Chalk the Walk" project that left colorful messages on College Green and a bat box building project that also shared information about these important creatures in the ecosystem. **Ramanan Raghavendran**, Chair of Penn's Board of Trustees, conveyed what it means to be a climate leader in today's world.



The Climate Week tent was abuzz with activity, events, and community during Climate Week 2024. Credit: Tommy Leonardi

Marketing for Climate Week included an [engaging promotional video](#) and a social media campaign featuring curated event lineups for career exploration, student-led research, and more. Looking ahead to Climate Week in 2025, the EII team reviewed the [Climate Week website](#) and added some features like improved search, news articles, and a self-serve event submission form.

Climate Change and
the Cryosphere

Jon Hawkings, PhD

October 2024

November 2024

Julie Ellis, PhD

Climate Change and
Wildlife HealthClimate Change and
Human Health

Farrah Hussain, MD

December 2024

Graphic continued next page.

Climate 101

The Climate 101 lecture series was proposed by the EII Internal Advisory Committee and introduced in April 2024 with a Q&A featuring **Michael Mann**. It began running monthly for the Penn community and beyond in September 2024. This lecture series explores how climate is interwoven with a variety of disciplines, helping to raise our climate literacy and prepare us to tackle one of the planet's greatest challenges. All lectures were recorded and are part of [a video library](#) for use in faculty's courses and for educational purposes of anyone looking to become more familiar with climate.

One Health @Penn Seminars

The concept of One Health refers to the inextricable link between environmental, human, and animal health. It's a framework increasingly adopted around the world to structure health monitoring, investigations, and interventions, and implicitly urges multi- and transdisciplinary ways of thinking and working. The [One Health @Penn Research Community](#) initiatives and a monthly seminar series spark connections and interdisciplinary collaboration to address highly complex problems related to health.

COMMUNICATIONS

Explainers

EII's Explainer articles clarify complex topics by providing background information, context, and analysis of challenging concepts related to climate change. In the past academic year, we've published Explainers on [Environmental Hazards & Public Health](#) (November 2024), [Climate Modeling](#) (March 2025), and [Tackling Food Waste](#) (June 2025).

Faculty Spotlights

The Faculty Spotlight series introduces Faculty and other Penn leadership to our community in the context of their work related to environmental sustainability and climate change. This year we shared the stories of [Greg Evans](#), Corporate Director of Sustainability for the University of Pennsylvania Health System, and [Barri Joyce Gold](#), Penn Professor of Practice in English.



157%

INCREASE IN INSTAGRAM FOLLOWERS

Increase in the number of Instagram followers @penn_environment from July 2024 to June 2025

70%

INCREASE IN NEWSLETTER SUBSCRIBERS

Increase in the number of subscribers to EII's monthly newsletter between June 2024 and July 2025

Newsletter

We distributed our monthly newsletter sharing our own activities and serving as a resource for news, events, and opportunities among partners across campus and beyond. A redesign unveiled in May featured a clickable table of contents, a more concise format, and new sections, *Faculty Fellows News* and *In Case You Missed It*.



The curated collection of environment-related courses available to undergraduate and graduate students at Penn can be sorted in several ways.

Social Media

An update to our social media strategy focused on publishing content to only Instagram and LinkedIn — as well as video content to our Vimeo channel — to better research our desired audiences on their favorite platforms. From fall 2024 to June 2025, our LinkedIn account gained more than 200 followers, while Instagram followers increased by nearly 300.

Website

EII staff collaborated with the website developer to revise our site navigation and refine the graphic design. EII continues to share on the [website](#) important news and event information. Analytics show that our most visited pages included our Explainers and Course Inventory.

CLIMATE 101 2024-2025

Climate Change and Philadelphia



Howard Neukrug

January 2025

February 2025

Benjamin Lee, PhD



Climate Change and Artificial Intelligence

Climate Change and Energy Insecurity



Chenyi Ma, MSW, PhD

March 2025

April 2025

Kathy Morrison, PhD



What do we need to know about Climate Change?

MEETINGS

EII represents Penn among higher education groups that work in the climate change space, learning how other universities share research and promote their programs.



Phil Valko, the assistant vice chancellor for sustainability at Washington University in St. Louis, led 2025 ACCESS attendees on a campus sustainability highlights tour.

ACCESS

EII continues to be an active member of Academic Consortium for Climate, Environment, and Sustainability Solutions (ACCESS), with Katie Baillie serving as co-chair. Meeting topics for the year and presenters included:

- December: *Global policy engagement* (Alex Hiniher, Carnegie Mellon)
- January: *Team science* (Washington University in St. Louis)
- February: *Funding landscape* (Xime Trujillo, Penn)
- March: *Collaborating with other groups on our campuses* (Katie Douglas, Duke)
- April: *Social media strategies* (Alex Hardy, Notre Dame)
- May: *Research development services* (Washington University in St. Louis)

- June: *Research into Action Efforts* (Sandra Goldmark, Columbia Climate School and Christine Seibert, Harvard's Salata Institute)

ESAC Committees

Penn's Environmental Sustainability Advisory Committee (ESAC) has been developing and executing Penn's climate and sustainability goals since the signing of the *Presidents' Climate Commitment* in 2007. ESAC subcommittees meet bimonthly to advance goals and tactics outlined in *CSAP 4.0*, with members then sharing information with their respective schools, centers, or departments. EII staff participate on two subcommittees: Academics, and Civic Engagement and Outreach. The Academics Subcommittee held its first meetings in the Spring 2025 semester, with representation from across the University, and focused initial conversations on augmenting opportunities for community-engaged scholarship and in launching a Campus as a Living Lab program.

Environmental Centers Working Group

This academic year saw the launch of Penn's Environmental Centers Working Group, convened to better coordinate the environmentally focused centers around campus. Led by The Water Center's Howard Neukrug and EII's Katie Baillie, the ECWG met in September 2024 and January and April 2025 to share best practices around student engagement, community-engaged scholarship, as well as operations and budgets. ECWG members also look for opportunities to collaborate and advocate together at the University level.



Photos left to right:

Prof. Benjamin Lee in SEAS presented, in February 2025, a Climate 101 session on AI and Climate Change. Credit: Katie Baillie
In 2025, the ever-popular 1.5 Minute Student Climate Lectures covered topics from hurricane impacts to green jobs. Credit: Tommy Leonardi



PEOPLE

STAFF

Katherine Unger Baillie
Director



Kate LaSpina
Program Coordinator



Kathleen D. Morrison
Faculty Lead



Ximena Trujillo
Senior Research
Coordinator



Heidi Wunder-Riegel
Associate Director



Thanks to our students!

EII's work would not be possible without our terrific team of student workers. During the 2024-25 academic year, Nikunj Agrawal, Arina Axinia, Yutong Du, Chenyao Liu, Stuti Mankodi, Xinyi (Bella) Min, and Ayma Waqar contributed valuable efforts to support the office's mission.

We also appreciate the following students who were members of our inaugural Student Advisory Committee (EII SAC):

Vanishika Arora (MES)
Winston Chen (SAS)
William Crawford (MES)
Phoebe Cunningham (PSOM)
Julia DeMeo (Weitzman)
Evelyn Gordi (MES)
Jason Klein (MES)

Nicholas Kwok (SAS)
Xintong Li (Wharton)
Lillian Miller (SAS)
Maya Miller (SAS)
Ananya Pillai (MES)
Lauryn Tsang (MES)



At the Penn Student Activities Fair, EII staff Kate LaSpina and Heidi Wunder-Riegel invite passersby to test their climate knowledge.

FACULTY FELLOWS

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The Wharton School



Henry Daniell
School of
Dental Medicine



Julie Ellis
School of
Veterinary Medicine



Emily Falk
Annenberg School for
Communication



Teresa Giménez
Latin American
Studies, School of Arts
& Sciences



Barri Joyce Gold
English, School of Arts
& Sciences



Jon Hawkings
Earth and
Environmental
Science, School of Arts
& Sciences



Zachary Herrmann
Graduate School of
Education



Heather Huntington
Political Science, School
of Arts & Sciences



Farah Hussain
Perelman School of
Medicine



FACULTY FELLOWS

Sarah Kagan
School of Nursing



Chenyi Ma
School of Social Policy
& Practice



Chinedum Osuji
School of Engineering
and Applied Science



Megan Ryerson
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Shelley Welton
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