From the Directors

2021 was an important year for us. Highlights include that we hired three team members, developed a strategic plan, created a strategic plan for the 2021-2022 academic year, and launched a modest set of programs.

Creating a new program in a venerable institution is not a simple task. While the Penn community writ large is eager for collaboration and connections on imperative topics such as the climate emergency, the biodiversity crisis, and environmental justice, there is no road map to support this work. The complexity of this work has been compounded by our timing: we are attempting to create a unifying program during a pandemic and at a time when the impacts of climate change are increasingly evident on campus in and in world.

This document offers highlights of the past calendar year. For us, 2021 was a year of learning. We prioritized building relationships and setting priorities by connecting and listening. We are working on assessing what makes Penn unique and how the Initiative can elevate existing work and advance a proactive agenda. As we look forward to 2022, we plan to continue the important work of connecting with stakeholders across campus while starting to actively foster synergies, raise visibility, catalyze partnerships, and grow programming.

We look forward to connecting with myriad stakeholders – students, faculty, staff, alumni, and external partners - as we continue to build the Environmental Innovations Initiative.

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Our team
Housed in the Office of the Provost, the overarching purpose of the Environmental Innovations Initiative is to foster collaboration across Penn’s campus on teaching and research related to the environment. To create structure for this work and support our mandate from the president, we have developed a vision and mission.

Vision
To inform the transition to a more resilient society and foster harmony with nature.

Mission
To catalyze solutions to significant real-world environmental challenges.

Mandate
• Facilitate innovative research that maximizes Penn’s distinctive interdisciplinary strengths, within and between schools, centers, graduate groups, and departments
• Recruit outstanding faculty members whose new perspectives advance the university’s work across such areas as climate change, sustainability, and environmental justice
• Develop formal and informal educational programs, as well as public events and communications, that further the impact of Penn research and bring new solutions to our campus and a wider global community
Our Goals

To provide a preliminary structure for our work as we create the Initiative, we have set five goals for the 2021-2022 academic year. A synopsis of each goal is offered here. Highlights from each follow.

**Faculty Engagement**
Support innovative and interdisciplinary faculty research and teaching.

**Student Engagement**
Offer fresh opportunities for learning and strive to ensure that every student has the opportunity to graduate with some sense of environmental ethics.

**Campus Engagement**
Catalyze new ideas, support new research, and maximize Penn’s distinctive interdisciplinary strengths.

**External Impact**
Organize public events designed to have tangible impacts on policy and research related to the most pressing environmental challenges of our time.

**Visibility**
Illuminate academic opportunities, connect Penn’s scholarly activities with its campus priorities, and advance the University of Pennsylvania as a leading resource.
Support innovative and interdisciplinary faculty research and teaching.

In partnership with Penn Sustainability, we are conducting a course gap analysis to determine how robust Penn’s curricular offerings are for climate, nature, resilience, environment and health, environmental justice, and urbanization. The outcomes will be a series of academic pathways for students and recommendations for faculty hires.

We launched a research community program to support multi-year efforts that foster collaboration from different disciplines around a common theme of broad environmental significance. Each community must include public-facing outcomes and opportunities for student participation. Communities must be led by members of the Penn community, collaboration with additional partners is valued. We awarded funded three communities in 2021 and will issue another call for proposals in 2022.

To address the need for introductory course offerings, the faculty co-leads and senior director are teaching Humans and the Earth System this semester. The goal is to help students develop an integrated understanding of climate change, linking the fundamental science to human actions and possible futures. Because the complexity and significance of planetary change demands new ways of thinking and new approaches that transcend traditional academic boundaries this course will serve as a foundational model that draws on the natural sciences (Francisco), social science and humanities (Morrison), and policy (Brown Goodall).
Offer fresh opportunities for learning and ensure that every student has the opportunity to graduate with a sense of environmental ethics.

We became the institutional home for Penn Climate Ventures and Climate Leaders @ Penn, student-led programs aimed at bringing together students from across all of Penn’s schools to advance solutions to the climate crisis.

We have created a set of student internship positions expressly designed to connect across disciplines and to offer meaningful professional experiences.

We are designing and Experiential Learning Program (working title) to curate and cultivate applied teaching and research collaboration among academic groups, between the university’s scholarship and operations, and between Penn and external partners. This program will both enhance Penn’s capacity to address urgent challenges such as climate change and biodiversity loss and create opportunities for students to learn practical skills to augment their academic experiences.
Catalyze new ideas, support new research, and maximize Penn’s distinctive interdisciplinary strengths.

As a new pan-university program, it is critical that we fully understand Penn’s academic strengths and the priorities of each of the 12 schools. We conducted interviews with the leadership of each of the schools to determine research and teaching expertise on topics such as climate, energy, nature, land use, biodiversity, food, water, justice, health, and chemicals. We also used these meetings to garner ideas for how the Initiative can support the work of the schools. These interviews formed the foundation for our Year One Strategic Plan.

In the fall semester, we convened our Internal Advisory Committee. This dynamic group of 34 individuals includes faculty, staff, and university leaders, and has representation from each of the 12 schools.

Penn has a remarkable array of centers, programs, and institutes working on topics related to the environment. Since the mandate of the Initiative is to foster collaboration and elevate Penn’s impact on environmental challenges, we have initiated a series of listening sessions to learn about the priorities of existing efforts and to explore ways to foster synergy among Penn groups and with external partners.
Organize public events designed to have tangible impacts on policy and research.

In March, Penn assumed leadership of the Global University Climate Forum, a program designed to bring together student activists from around the world to share ideas, learn, connect, and act on the global imperative of addressing climate change. To be included, student teams needed to submit their idea for a local-scale project that would yield measurable results over the course of six month. Nearly 600 students from 44 countries participated.

We developed a publication, The Knowledge Sector: The role of Higher Education Institutions in addressing Global Environmental Challenges, to feature the work of the Global University Climate Forum. Patricia Espinosa, the Executive Secretary of the UN Framework Convention on Climate Change authored the Foreword and the Next Steps were written by Christiana Figueres, Co-founder of Global Optimism and Former Executive Secretary of the UN Framework Convention on Climate Change.

In collaboration with the International Sustainable Campus Network, Penn is leading the Knowledge Sector Project, a multi-year collaborative designed to elevate the visibility of higher education institutions in public policymaking – especially at the global scale.
Illuminate academic opportunities, connect Penn’s scholarly activities with its campus priorities, advance Penn as a leading resource.

With Penn Sustainability, the Faculty Senate Select Committee on the Institutional Response to the Climate Emergency (CIRCE), the Student Sustainability Association at Penn (SSAP), and Climate Leaders @ Penn (CL@P) we co-led Penn Climate Week, which yielded 45 events across campus in September.

We created a temporary website to raise awareness of the Initiative while it takes shape, and are in the process of developing an online portal for all of Penn’s environmental activities and will feature ways for students, staff, faculty, and alumni to connect.

We use Instagram, Twitter, Facebook, and LinkedIn to raise the awareness of the Initiative and to promote the work of schools, centers, institutes, and colleagues from throughout campus.

We are conducting a series of analyses to use a data-driven approach to establish Penn’s niche vis-à-vis environmental teaching and research.
What to expect in 2022

This is a time of unprecedented change. Globally, the pandemic persists and climate change impacts are making daily headlines. On our campus, we are experiencing a sea change in how we work and study and many of the leaders who have navigated Penn through these troubled waters are stepping down. Through this time, we will work to ensure that the Initiative is a reliable resource for connection, collaboration, and impact. Some key elements of how we will do this are included here.

**Faculty Engagement**
We are developing the framework to create a database that connects Penn’s teaching and research to the UN Sustainability Development Goals. When done, this will provide insights into Penn’s academic strengths and will be the foundation for a searchable database to catalyze collaboration across disciplines.

**Student Engagement**
We will continue to support our existing peer engagement groups as we envision expanded opportunities for hands-on learning and student fellowships. Students will also be directly involved with our experiential learning programs.

**Campus Engagement**
As we continue to cultivate and grow relationships with other groups on campus, we will start to structure programs to leverage and elevate existing strengths. We will also work with each School to establish and implement programs that enhance the priorities of the deans.

**External Impact**
In April, we will host a set of collaborative events to mark Earth Day. The Initiative has become the administrative lead for Climate Week, which will take place in September. We plan to launch our new website and the Penn Environment Portal in the fall.

**Visibility**
Following the spring launch event of the Knowledge Sector publication, we will lead a follow the sun conference in locations around the world to explore pathways for higher education institutions to directly engage with public policymaking at various scales. With Penn Sustainability, we will also commence work on a resilience plan for campus.

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Let’s connect.

Newsletter  Website

Follow us on social media!