2023 AASHE Award Submission Duke University

Title:

Duke University Climate Commitment

Project Overview:

As Duke University enters its second century, President Vincent Price has directed the University to marshal its collective resources and capabilities to address the climate crisis. Stemming from President Price's call to action, the <u>Duke Climate Commitment</u> aims to build on Duke's long standing work to proactively create impactful, just, and durable climate and sustainability solutions that place society on the path toward a resilient, flourishing world with mitigated climate risks. To accomplish this major undertaking, the Commitment weaves climate and sustainability through every aspect of the University's core missions of education, research, sustainable operations, community partnerships, and external engagement.

- Duke will **educate** and empower a climate- and sustainability-fluent student body that understands anthropogenic climate change and its origins and is well-equipped to address it by innovating and implementing creative, scientifically informed, just, and responsible solutions.
- Additionally, Duke will prioritize investments in **climate research** areas in which the University already has strength: transforming energy, fostering climate-resilient communities and ecosystems, elevating environmental and climate justice, and developing data-driven climate solutions.
- Duke will further build on existing **sustainable operations and facilities** efforts to demonstrate how a complex institution can proactively tackle the climate crisis. The University will look beyond its 2024 carbon neutrality goal to develop next-level sustainable operations that focus on campus energy use, transportation, waste management, and procurement.
- Beyond campus, Duke will connect authentically in its local and global **partner communities**, so that collective insights and wisdom may inform and create more durable solutions that recognize mutual interdependencies.
- To amplify its total societal impact, Duke will challenge its units and scholars focused on **external engagement** to work with partners in the public and private sectors and civil society to pursue impactful opportunities where Duke can contribute to building a just and sustainable future.

The Commitment takes root in four focal areas of Duke expertise: **energy transformation**, **climate and community resilience**, **environmental and climate justice**, and **data-driven climate solutions**. While Duke stands among many peer institutions working in these domains, the Commitment will capitalize on the University's interdisciplinary culture to make contributions to these fields that are "distinctly Duke."

Climate and sustainability are topics at Duke that stretch across disciplines, interconnect operations and academics, cross campus boundaries, reach into the community, and around the world. As the University embarks on its second century, it is imperative that it address the global challenges posed by climate

change with sustainable solutions that challenge existing paradigms to not only benefit current society but create a just and equitable world for future generations.

Organization(s): Duke University

Background:

As Duke embarked on the formation of the Climate Commitment, three main university assets came together to lead this work, informed by countless other faculty, staff and students. These three entities include:

The Nicholas School of Environment at Duke University is one of the world's leading graduate and professional schools for the interdisciplinary study of the environment. The School celebrates its creation date as 1991, but it represents a coming together of three entities that are almost as old as the university itself. (The School of Forestry and Environmental Studies (1938, the Duke University Marine Lab (1938), and the Department of Geology (1936). The Nicholas School creates knowledge and leaders of consequence for a sustainable future through a new paradigm in research and education: one that attempts to understand the Earth, the environment, and people and human institutions as an integrated whole, and to use that understanding to foster and spread the ethic of environmental stewardship. The school provides a comprehensive multidisciplinary program focused on the relationship of the environment and society to prepare scientists, managers and policymakers to promote the sustainable use of Earth's resources.

The Nicholas Institute was founded in 2005 with the mission to help decision makers create timely, effective, and economically practical solutions to the world's critical environmental challenges. In 2022, The Nicholas Institute for Environmental Policy Solutions merged with the Duke University Energy Initiative to create a new organization: the Nicholas Institute for Energy, Environment & Sustainability. Working closely with Duke University schools and other units, the institute advances the university's mission to build a more sustainable world by developing transformative educational experiences; galvanizing and conducting impactful research; and engaging with key decision makers at the global, national, state, and local levels.

The office of **Sustainable Duke** at Duke University was created in 2004 with the mission of educating and empowering the Duke community to create a more sustainable future through social, economic, and environmental change on Duke's campus and beyond. Over the past two decades, Duke University has set aggressive sustainability goals, including its goal to be carbon neutral starting in 2024, which are outlined in its Climate Action Plan and Sustainability Strategic Plan. Sustainable Duke is uniquely positioned within the Office of the Executive Vice President to work with senior administrators, students, faculty, and staff to set and achieve sustainability goals for the University. The Office also works closely with faculty and staff to connect Duke's operational sustainability efforts to experiential learning that utilizes the campus as a teaching tool, raises awareness and improves performance around sustainable practices and behaviors related to campus life.

Duke's Climate Commitment has been built on these foundational efforts within the School, Institute and Sustainable Duke as well as climate and sustainability work across the institution in business, law, policy, engineering, divinity, medicine, nursing and the humanities. However, the past several years have brought the need for more of an intense focus on the role Duke should play in addressing the climate crisis and contributing to the solutions to it. All too often the narratives associated with climate change have been ones of despair and doom. A more positive, solutions- and impact-oriented perspective is needed. Duke leadership felt the time was right to focus our efforts on the following.

- **Purpose:** Create knowledge and solutions and convene changemakers to guide climate-affecting decisions for communities, businesses and governments
- **Differentiator:** Commitment to building true climate fluency, capabilities, and actions across our entire mission and through every discipline
- **Method**: Activate every facet of the institution and mobilize thousands of climate-fluent students, faculty, staff and alumni to address global climate change now and in the future

The Climate Commitment concept was developed by Duke senior leadership, key faculty working groups and a Trustee Task force in 2020-21. It started with the President and Provost convening the deans of all ten schools to help identify Duke's comparative strengths in climate and create an actionable path forward. This led to a broad faculty working group called the Climate Initiative, and a trustee task force focused on climate and sustainability.

The Climate Change and Sustainability Board of Trustees Task Force was charged in 2020-21 with ensuring Duke has the solutions and impact-oriented perspective needed to meet the 2024 carbon neutrality goal while more broadly addressing the climate crisis through its education, research, operation, and engagement efforts. The foundational principle of the Climate Change and Sustainability Task Force (TF) was the imperative to maximize Duke University's potential Total Societal Impact (TSI) through a focus on how we can help create a sustainable future for our students, our employees, and the communities we live in. The TF was asked to address how to do this through Duke's educational, research, operational and community engaged missions.

Justice, Equity, Diversity, and Inclusion (JEDI) considerations were a central, guiding lens in the TF deliberations as the work progressed. Being cognizant and deliberate about these issues was especially important given the University's acknowledgment of Duke's historic connections to systems of racism and inequity. Duke is committed to interweaving JEDI principles into all of its climate and sustainability efforts as we work towards a more just future.

The Task Force also created two working groups, which met on an ad-hoc basis. The first working group was tasked with developing an engagement survey, which was widely distributed to internal and external stakeholders. The survey received nearly 1,000 responses from Duke students, staff, faculty, and alumni, community members, and representatives from external organizations including NGOs, peer universities, government, and businesses. This information was used to inform the TF's meeting focus areas and future academic, operations, and community action recommendations. The second working group was tasked with developing recommendations that would lead Duke to becoming a leading climate university.

Along with survey data, the TF engaged with multiple campus stakeholders from the academic and operational perspective, the Campus Sustainability Committee, and interested student groups to inform its work. The TF also reviewed best practices in sustainability and climate leadership from peer institutions and corporate entities.

In parallel to the TF, the Duke Climate Initiative was tasked by the Provost to identify Duke's unique climate change research and education strengths. Faculty working groups comprised of more than 50 faculty and staff representing all of Duke's Colleges/Schools, as well as the Nicholas Institute for Energy, Environmental & Sustainability convened in three priority areas - Energy Transformation, Climate Resilience and Climate & Data Science. This effort was led by Nicholas School of Environment and Nicholas Institute of Energy, Environment & Sustainability. The Duke Climate Initiative collaborated with the Deans of Duke's ten schools and regularly updated the TF to inform the TF's research recommendations.

The TF and the Climate Initiative faculty working group collaborated to develop high level recommendations to guide Duke's efforts and infuse climate and sustainability into all aspects of the University's mission.

Project Goals:

The Duke Climate Commitment represents a watershed moment for the University at a critical moment for humanity. Through the Commitment, the University will elevate its existing climate and sustainability initiatives while also investing in new directions. These efforts will infuse every aspect of Duke's mission and further capitalize on the interdisciplinary strengths for which Duke is well known. Duke scholars will make scientific advancements while also contributing to the economic, political, legal, social, and philosophical frameworks — the assumptions, policies, and goals — that put the world on a path toward resilience and justice. Duke University will lead the way in addressing these challenges as a living demonstration site of cutting-edge sustainability practices, an incubator of innovation, and a crucible for shaping the next generation of student leaders who will effect positive change in the world. By making the university-level commitment to combat the climate crisis, Duke sends a strong message about the need for a truly all-hands-on-deck approach toward the creation of a flourishing and equitable world.

The <u>Duke Climate Commitment</u> aims to build on Duke's long standing work to proactively create impactful, just, and durable climate and sustainability solutions that place society on the path toward a resilient, flourishing world with mitigated climate risks. To accomplish this major undertaking, the Commitment weaves climate and sustainability through every aspect of the University's core missions of education, research, sustainable operations, community partnerships, and external engagement.

- Duke will educate and empower a climate- and sustainability-fluent student body that understands anthropogenic climate change and its origins and is well-equipped to address it by innovating and implementing creative, scientifically informed, just, and responsible solutions.
- Additionally, Duke will prioritize investments in climate research areas in which the University already has strength: transforming energy, fostering climate-resilient communities and ecosystems, elevating environmental and climate justice, and developing data-driven climate solutions.
- Duke will further build on existing sustainable operations and facilities efforts to demonstrate how a complex institution can proactively tackle the climate crisis. The University will look

beyond its 2024 carbon neutrality goal to develop next-level sustainable operations that focus on campus energy use, transportation, waste management, and procurement.

- Beyond campus, Duke will connect authentically in its local and global partner communities, so that collective insights and wisdom may inform and create more durable solutions that recognize mutual interdependencies.
- To amplify its total societal impact, Duke will challenge its units and scholars focused on external engagement to work with partners in the public and private sectors and civil society to pursue impactful opportunities where Duke can contribute to building a just and sustainable future.

"Distinctly Duke" Impact Areas

The Commitment takes root in four focal areas of Duke expertise: energy transformation, climate and community resilience, environmental and climate justice, and data-driven climate solutions. While Duke stands among many peer institutions working in these domains, the Commitment will capitalize on the University's interdisciplinary culture to make contributions to these fields that are "distinctly Duke."

- In energy transformation, Duke will leverage its expertise in new energy materials development, grid integration, environmental impacts of new and legacy energy sources, and energy economics; its energy-focused centers and units; and its location to become a Top 10 energy research university. As a regional thought leader in the southeastern United States and a collaborative partner with high-tech industries in the nearby Research Triangle Park, Duke has the unique opportunity to lead the region in clean tech development, building on North Carolina's diverse extant and potential clean energy capabilities through hydroelectricity, solar, and wind.
- The University will expand its work in climate and community resilience, founded on decades of research at sites such as the Duke Forest, Duke Marine Lab, Duke Wetlands Center, Duke Lemur Center, and Duke Campus Farm. Areas of particular emphasis include coastal habitats and communities, water resources and livelihoods, and climate adaptation, employing both engineered and nature-based solutions. Furthermore, partnerships with the Duke Office of Durham and Community Affairs will continue to provide opportunities for dynamic, collaborative work to support community resilience in the Durham area.
- Environmental and climate justice will emphasize the need to understand and address the more equitable distribution of mitigation and adaptation opportunities and burdens in Duke's climate efforts. Drawing from the region's deep history in the environmental justice movement, the Commitment will build on existing environmental justice partnerships from across and beyond the University, with the goal of becoming a recognized leader in environmental and climate justice research, teaching, and action.
- Duke's robust expertise in data science, mathematics, statistics, artificial intelligence, and machine learning will enable the development of data-driven climate solutions. Climate change solutions necessitate effective, accurate, and ethical translation of large datasets across a range of topics and disciplines to respond nimbly to the challenges of the moment. During Summer 2022, the Commitment launched two signature data-centric programs: Data-Driven Climate Expeditions, aimed at building climate research collaborations across the University, and Climate+, aimed at teaching Duke students how to solve complex climate problems through data science methods and interdisciplinary thinking.

As Duke builds climate literacy among its students, develops deeper research expertise in energy transformation, climate resilience, and data-driven exploration, invests in greater operational

sustainability, and forges deeper partnerships with the surrounding community, the University will expand its role as a change agent near and far. These climate and sustainability motivated actions will transform the environment of Duke's campuses and the knowledge creation and solutions will creatively guide critical decisions in the public and private sectors. This builds on Duke's existing institutional strengths in the climate realm and amplifies the University's deep and long-standing commitment to transform knowledge into practice that yields strong and positive societal impact.

Project Implementation:

The implementation of the Climate Commitment is still evolving and developing, given it is the first year of this institution wide effort. Therefore, implementation strategies to meet the commitment will continue to grow as the university further develops the structures, partners and processes to meet these ambitious goals.

Implementation is currently overseen by a two-tiered governance and management structure. A Climate Action Committee (CAC) with key staff from Nicholas School of Environment, Sustainable Duke and Nicholas Institute of Energy, Environment & Sustainability, Development and Communications meets regularly to advance climate ambitions in all five priority areas. The CAC is charged with oversight and coordinating day-to-day work related to keeping Climate Commitment efforts coordinated and moving throughout the University. Meeting twice monthly, this group leads the Climate Advisory Council, appointed by the President and Provost, which is a group of institutional leaders tasked with offering guidance and inspiration as Duke implements its Climate Commitment vision. The Council meets every 4-6 weeks to receive updates and provide direction and advice on activities spanning Duke's comprehensive mission of research, education, engagement, and operations --all with the goal of taking a just, equitable, and sustainable approach to addressing the climate crisis. An internal climate communications subcommittee is connecting and amplifying efforts.

The following includes the specific, measurable commitments on climate, embedded into the five areas of Duke's strategic framework: empowering the boldest thinkers, transforming teaching and learning, renewing our campus community, forging purposeful partnerships in Durham and the region, and engaging our extraordinary global network.

As we empower the boldest thinkers, we commit to:

- expand and further refine our climate research in four core areas—energy transformation, climate and community resilience, data-driven climate solutions, and environmental and climate justice;
- support research projects related to climate through new initiatives, including:
 - o the Climate Research Innovation Seed Program (CRISP),
 - o <u>University-Wide Collaboration Grants on Climate Change</u>, and
 - o <u>Data Expeditions;</u>
- engage faculty, students, and staff from across the university to foster new collaborative and interdisciplinary research connections.

As we transform teaching and learning, we commit to:

- build on the success of <u>UNIV102</u> and partner with schools across the university to infuse climate and sustainability into educational programs, preparing Duke students to lead in the 21st century;
- launch a <u>teaching fellows program</u> to support instructors in incorporating climate and sustainability in their courses;
- offer workshops to students, faculty, and staff to deepen their knowledge and agency on issues related to climate and sustainability;
- explore resource needs for career services to better prepare students for entering the workforce with the goal of contributing to climate change solutions;
- expand the <u>Campus as Lab</u> program to use Duke's campus as a living laboratory.

As we renew our campus community, we commit to:

- continue progress towards Duke's goal for carbon neutrality, outlined in the <u>2019 Climate Action</u> <u>Plan Update</u>. Duke will build on the 43% greenhouse gas emissions reductions to date as we navigate challenges primarily spawned from the pandemic, with a focus on:
 - campus energy efficiency,
 - off-campus solar,
 - renewable natural gas, and
 - opportunities to retain the significant emission reductions realized in employee commuting and air travel over the past two years.
- continue to work with a staff, faculty and student advisory committee to evaluate potential carbon offsets projects that meet our high standards;
- seek new opportunities to directly engage staff in Duke's sustainability efforts, including through workshops, workplace certifications, and educational resources;
- develop a Duke Sustainable Fleet and Electric Vehicle (EV) Charging Plan to reduce the impact of campus vehicles and expand EV infrastructure;
- continue working with Duke University Management Advisory Company to support endowment investments in <u>sustainability</u>, in accordance with the <u>Guideline on Investment Responsibility</u> adopted by the Board of Trustees;
- expand efforts to infuse sustainability further into Duke's supply chain through campus policies and contract language;
- explore opportunities to support and increase sustainability efforts in the Duke Health system.

As we forge purposeful partnerships in Durham and the region, we commit to:

- strengthen our relationship with the City of Durham and promote regional sustainability through the <u>Strategic Community Impact Plan</u> developed by the Office of Durham and Community Affairs;
- engage local, state, and federal policymakers regarding equitable climate and sustainability solutions;
- deepen our involvement with green entrepreneurs, investors, and industry leaders in the Research Triangle and beyond.

As we engage our global network, we commit to

- convene climate leaders on campus to share their work and engage with the Duke community, including these events in Spring 2023, among others:
 - <u>Sustainable Business and Social Impact</u> conference,

- <u>Blue Economy Summit</u>, hosted by Oceans@Duke,
- <u>Climate Change, Decolonization, and Global Blackness</u> series at the John Hope Franklin Humanities Institute, and
- <u>Histories and Society in the Hydrosphere</u> conference, hosted by the Center for International and Global Studies;
- develop opportunities for alumni who are invested in climate and sustainability work to connect with our education, research and engagement efforts on campus and beyond;
- provide climate and sustainability literacy and fluency opportunities for alumni through lifelong learning and digital education partnerships.

Over the coming months and years, we will track our progress on these commitments. We recognize that this initiative may evolve and will take time to implement, and we will only succeed through the collective action of our students, faculty, staff, alumni, and friends.

Project Timeline:

- March 2020 President, Provost and Deans meeting Beginning spring 2020, President Price signaled a desire to focus Duke's considerable talent on one of the profound challenges of our time—climate change. After initial consultation with the Deans of Duke's ten schools, he and Provost Kornbluth initiated a process to charter three Working Groups comprised of more than 50 faculty and staff representing all of Duke's Colleges/Schools, as well as the Nicholas Institute for Energy, Environmental & Sustainability, to help identify Duke's comparative strengths and create an actionable path forward.
- April '20-April '21 Faculty Working Groups convened in three priority areas led by Nicholas School of Environment and Nicholas Institute of Energy, Environment & Sustainability
 - Energy Transformation Working Group led by Kate Konschnik, J.D., Director, Climate and Energy Program, Nicholas Institute; and Eric Rohlfing, Ph.D., Energy Executive in Residence, Energy Initiative
 - *Climate Resilience Working Group* led by Mark Borsuk, Ph.D., Associate Professor of Civil and Environmental Engineering, Pratt School of Engineering; and Lydia Olander, Ph.D., Director, Ecosystem Services Program, Nicholas Institute
 - *Climate and Data Science Working Group* led by Kyle Bradbury, Ph.D., Assistant Research Professor, Pratt School of Engineering & Managing Director, Energy Data Analytics Lab, Energy Initiative; and Martin Doyle, Ph.D., Professor of River Systems Science and Policy Chair, Water Resources Management Program, Nicholas School of
- Sept '20-May '21 Board of Trustees Task Force on Climate Change & Sustainability Trustee Chair and Co-Vice-Chairs Toddi Steelman, Dean of the Nicholas School of Environment and Tavey Capps, Executive Director of Climate and Sustainability
 - The foundational principle of the Climate Change and Sustainability Task Force (TF) was the imperative to maximize Duke University's potential Total Societal Impact (TSI) through a focus on how we can help create a sustainable future for our students, our employees, and the communities we live in. The TF was asked to address how to do this through Duke's educational, research, operational and community engaged missions.
 - Justice, Equity, Diversity, and Inclusion (JEDI) considerations were a central, guiding lens in the TF deliberations as the work progressed. Being cognizant and deliberate about these issues is

especially important given the University's acknowledgment of Duke's historic connections to systems of racism and inequity. Duke is committed to interweaving JEDI principles into all of its climate and sustainability efforts as we work towards a more just future. It is imperative that any costs, financial or otherwise, are not borne inequitably and that any benefit is justly distributed.

- **Summer '21-Today** Climate Action Committee and Advisory Council formed to focus on collaborative planning, program development, early fundraising
 - A Climate Action Committee (CAC) with key staff from Nicholas School of Environment, Sustainable Duke and Nicholas Institute of Energy, Environment & Sustainability, Development and Communications meets regularly to advance climate ambitions in all five priority areas. A Climate Advisory Committee of senior leadership helps guide these efforts and meets quarterly. An internal climate communications subcommittee is connecting and amplifying efforts.
- September '22 Duke Climate Commitment announcement Duke formally announced the Climate Commitment that builds on the university's long standing leadership in climate, energy and sustainability to educate a new generation of climate-fluent innovators and create equitable solutions for all. The effort unites the university's education, research, operations and public service missions to engage the entire community in the pursuit of climate change solutions.
- May '23 Creation of new Vice President and Vice Provost for Climate and Sustainability at Duke - Toddi Steelman, the Stanback Dean of Duke's Nicholas School of the Environment, has been appointed to a new leadership position overseeing the Duke Climate Commitment. In this role, Steelman will be the chief administrative and academic officer in charge of advancing the Duke Climate Commitment and will lead the newly created Office of Climate and Sustainability. She will report jointly to the provost and executive vice president, and will serve as a member of the President's Cabinet.

Financing:

Staff time/leadership -- Much of the "cost" of the development of this initiative has been three years of in-kind, internal staff time of key campus stakeholders, including the leadership team of the Dean of the Nicholas School of Environment, Executive Director of Climate and Sustainability and the Director of the Nicholas Institute of Energy, Environment & Sustainability, as well as countless other senior leadership, faculty, staff and students that have served on task forces and planning committees.

Philanthropy -- supporting initial work and foundational support for future efforts

The Duke Endowment - \$5 million over 5 years

The first award to the Duke Climate Commitment — \$5 million representing the earliest philanthropic support of the new initiative — came from The Duke Endowment, the private foundation based in Charlotte, N.C., that was established in 1924 by industrialist and philanthropist James B. Duke. This support helped launch several initial efforts across the 5 pillars of the Commitment, including helping to solidify a Duke Climate Commitment primary goal around climate fluency for all students.

- \$400,000 Climate Commitment Launch and educational symposia formal launch event highlighting Duke's convening power and raising awareness about our ambitions within and outside Duke. The launch also kicks off a series of strategic symposia aligned with the three themes of the Climate Commitment transforming energy, creating a climate-resilient future, and building data-driven climate solutions.
- \$2 million Expanding and infusing climate and sustainability fluency -
 - Climate course development of an annual University-wide course geared to undergraduates, but open to all students. This <u>one-semester course</u>, offered for at least four years initially, equips students with the fundamental knowledge, the basic methodologies and analytical tools, and the crucial questions they need to become engaged citizens prepared to address climate change realities from diverse vocational points of view.
 - Enhancing Campus as Lab expansion and staff support for Duke's existing Campus as Lab that seeks to enhance the relationship among Duke University faculty and student research, Duke's own campus, and the community to tackle real-world climate and sustainability challenges here at home.
 - Launch Climate+ a new vertical within Duke's Data+ program, <u>Climate+</u> engages small teams of undergraduates and graduate students in climate-related, data-driven research projects focused on diverse topics.
- \$1.5 million Duke Data Expeditions funding for transdisciplinary research teams across Duke University to explore intersections of climate and many other pressing world issues. The first of three expeditions was <u>Climate and Health</u> to develop the necessary data infrastructure and literacy to generate knowledge, leverage partnerships with external experts and community-level organizations to ensure implementation and impact and innovate and translate discovery research to ensure findings are actionable and accessible.
- \$500,000 *Campus Climate Action* funding for continued investment in Duke's carbon neutrality goal by 2024 and support for additional campus planning looking beyond 2024 for continued opportunities for carbon reduction and climate/sustainability leadership.
- \$600,000 *Climate Commitment administration* funding for staff capacity for implementation and evaluation.

Individual Donors:

- \$25 million Presidential Fund for the Climate Commitment
- \$3.5 million Professorship in Nicholas School of the Environment for environmental policy and/or economics
- \$750,000 Launch DESIGN Climate between Nicholas School of the Environment and Pratt School of Engineering
- \$700,000 Launch Climate Finance track in Duke Financial Economics Center
- \$375,000 Climate literacy to add courses with climate content and revise existing courses to include climate content

Project Results (or results to date):

The Climate Commitment is an ongoing effort for which results will be realized continuously over time. The following work represents a spring 2023 snapshot of progress across the institution toward achieving the goals of the Duke Climate Commitment:

EDUCATION:

- Launched <u>Climate+</u> summer research experience (five student teams in Summer 2022), <u>Project</u> <u>Earth</u> pre-orientation program (120 students in Summer 2022), and <u>UNIV 102: Let's Talk About</u> <u>Climate Change</u> (150 students in Fall 2022). These will all be offered again in 2023 to new student cohorts.
- Developed Design Climate and M.Eng. in Climate and Sustainability Engineering programs. An Executive-in-Residence hire has been made to lead Design Climate, and an offer has been extended for the director of the M.Eng. in Climate and Sustainability Engineering program.
- Four new climate finance courses in Economics have been developed since Fall 2022 through funding providing by the Marrs gift reaching 50+ students.
- Selected 12 Duke faculty for the inaugural cohort of the Climate and Sustainability Teaching Fellows Program. This program will aid faculty in infusing climate and sustainability topics into existing Duke courses through a series of workshops during Summer 2023.
- Hired inaugural staff position to lead Duke's Campus as Lab program to connect student education and faculty research to community and operational climate and sustainability efforts
- Trained 20 Duke faculty, staff, and graduate students from across campus to deliver the <u>Climate</u> <u>Fresk</u>, a three-hour interactive workshop that teaches the fundamentals of climate science.
- Delivered the <u>Climate Changemakers</u> webinar series in Spring 2023, hosted by the Forever Learning Institute (DAED). Additional climate-related series are planned for 2024 and beyond.
- *Currently underway:* Developing a framework to integrate climate and sustainability into students' learning across the institution. This includes key learning outcomes, curricular integration opportunities, and processes around tracking climate and sustainability courses.

RESEARCH:

- Awarded eight faculty teams <u>University-Wide Collaboration Grants on Climate Change</u> in Summer 2022 to seed interdisciplinary climate work cross-campus.
- Provided nine faculty teams with one year of seed funding, and five teams with additional two-year research project funding, through the <u>Climate and Health Data Expeditions</u> program, bringing together 53 researchers from SOM, DUSON, and University schools, institutes and centers.
- Convened eight faculty focus groups to further define and distill Duke's climate research direction.
- Solicited 41 proposals for the <u>Climate Research Innovation Seed Program</u>, to support full research or ideation proposals. Award announcements will be made in April 2023.

SUSTAINABLE OPERATIONS:

- Finalized plans to achieve 2024 carbon neutrality goal through a combination of internal reductions (43% as of FY22), offsite solar power and high-quality carbon offsets.
- Developed Environmentally-Preferred Procurement Policy for institutional supply chain.
- *Currently underway:* Partnering with Duke University Health System to convene Climate Change, Health and Equity task force, charged with improving operational sustainability across DUHS.
- *Currently underway:* Renewing focus on deeper, internal carbon reduction efforts to reduce offset need by 2030 including utility infrastructure improvements, fleet EV transition and reduction in air travel. Planning for next-level sustainability strategies around enhanced supply chain work and waste management across Duke.

EXTERNAL ENGAGEMENT:

- Hosted <u>Winds of Change: Tracking the Development of US Offshore Wind Energy</u> symposium, bringing together over 200 public and private sector stakeholders and energy professionals, with keynote by NC Governor Roy Cooper.
- Hosted NC Congressional Delegation virtual briefings and Conference on Climate Change and Migration at Duke in DC office in Washington, DC.
- Solicited nominations from deans for new Climate Leaders in Residence program, modeled after Rubenstein Fellows program. Committee of advisors is shortlisting three top nominees for President Price and Interim Provost Francis, who will review and make a decision. An offer will be extended to the final nominee in Spring/Summer 2023.
- *Currently underway*: Partnering in the development and launch of the <u>New York Climate</u> <u>Exchange</u>.
- *Currently underway*: Launching the Duke in DC <u>Climate and Sustainability Summer Institute</u> in Summer 2023, a non-credit short course to build climate knowledge among policy professionals.

COMMUNITY PARTNERSHIPS:

• *Currently underway:* Collaborating with staff from the Duke Office of Durham and Community Affairs to build connections across climate and sustainability efforts and Duke's new Strategic Community Impact Plan.

One of the most significant outcomes to date was the May 2023 announcement of a new leadership position overseeing the Duke Climate Commitment. Starting in July 2023, Toddi Steelman will serve as the vice president and vice provost for climate and sustainability. Steelman will be the chief administrative and academic officer in charge of advancing the Duke Climate Commitment and will lead the newly created Office of Climate and Sustainability. She will report jointly to the provost and executive vice president, and will serve as a member of the President's Cabinet.

Lessons learned:

Throughout the past three years, the leadership team of the Climate Commitment have worked with stakeholders from within and beyond Duke to build this ambitious endeavor. From the inception, planning, and early implementation stages, many lessons have been learned along the way.

- Strategy
 - Consider where your foundational work around climate and sustainability sits within the University, build on that, but also cast a wide net from the very beginning to include stakeholders that aren't the "usual suspects". This includes the community within which your institution sits.
 - Consider opportunities to connect this to other university priorities and Presidential strategies
 - This work takes time and patience to build consensus and trust your leadership team can try to keep things moving but being willing to course-correct or find ways to bring in new perspectives along the way is key. It also takes a willingness to discuss challenging topics, so having the support of the administration to be transparent is very important. Be prepared to acknowledge that the institution may not have gotten it right in the past.
 - The urgency of the work needs to be tempered with building capacity and structures that can durably support it
 - This is work that will always be in progress and will never be "done"

- Be prepared for skepticism and cynicism and be equally prepared to keep moving forward
- Implementation
 - Measurable outcomes on action are critically important toward building trust
 - Find ways for faculty, staff and students to be a part of the planning process not just recipients of information when things are already decided
 - Find ways to celebrate foundational efforts even as you talk about the future and new programs/ideas – don't assume the campus community already knows about these past efforts
 - As you inventory your assets in climate and sustainability be sure to also define 3-4 focal areas to pursue in this vast topic
 - It is risky to announce a major initiative like this without much of the money in hand.
 Take great care in clarifying the difference between long-term ambition and current outcomes. Communicate a clear path between the two.
- Leadership and Staffing
 - Part of our success was bringing many different layers of Duke leadership together for this joint purpose – Trustees, President, Provost, EVP, other senior administrative leaders, Deans, faculty, students, and staff. Having support of the President and Board of Trustees sends a very strong authority signal that this is an institutional priority
 - Needs a leadership team to be accountable to keep things moving takes a lot of time, especially if that team has other important roles at your institution that this is additional to
 - Eventually the team of people doing this on a part-time basis needs to be supplanted by a team led by a single senior leader with full time responsibility for development and implementation
 - Its extremely difficult to move from planning phase to implementation phase without additional staff capacity – often focus can be on faculty hiring to enhance teaching/research but being clear about additional staff needs is imperative
- Communication
 - Infuse broad communication efforts about vision/goals with practical milestones and early wins to show progress. We received push back after our Climate Commitment announcement event that, while the campus community applauded the ambition, they wanted a lot more detail about what exactly we would be doing in the near term and how we would measure success/hold ourselves accountable.
 - Development and Communications staff are key allies to include early. Be sure that these teams are very clear what their roles are in creating and conveying the message of what the effort is and what it is trying to accomplish.

As we learn from these lessons and shape future progress, it is important to note that the Duke Climate Commitment is an ambition that will guide the University far into the future. Over the coming months and years, we will track our progress on these commitments. We recognize that this initiative may evolve and will take time to implement, and we will only succeed through the collective action of our students, faculty, staff, alumni, and friends.

AASHE Award Category:

Campus Sustainability Achievement Award



