



HARVARD
UNIVERSITY

Sustainability

Harvard University Sustainability Action Plan



**Accelerating action to protect
the climate and environment,
advance a more equitable
society, and promote the
wellbeing of people.**

Contents

ACKNOWLEDGMENT OF LAND AND PEOPLE:

Harvard University is located on the traditional and ancestral land of the Massachusetts, the original inhabitants of what is now known as Boston and Cambridge. We pay respect to the people of the Massachusetts Tribe, past and present, and honor the land itself which remains sacred to the Massachusetts People.¹

¹. Acknowledgment of Land and People developed by the Harvard University Native American Program.

Front Cover: Aerial view of Harvard's campus in Cambridge, MA.
Photo by Peter Vanderwarker

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From Our Leadership

Message from the President

Ensuring a sustainable planet and protecting it for future generations are among the greatest challenges of our time. Looking to that future, Harvard has a responsibility to act—and to do so with urgency. Hastening sustainability efforts requires more than just individual and collective work, it requires rethinking and reimagining systems that have been built over centuries, systems upon which we all currently rely.

At Harvard, we have a proud legacy of taking institutional action to advance sustainability. What starts here is often emulated and adopted. We therefore have a profound and unique opportunity to use our intellectual and financial resources to innovate, pilot, prove, and scale new approaches and systems. Harvard's Sustainability Action Plan, first adopted in 2014, has been and continues to be our roadmap, leveraging our campus as a living lab for putting research, innovation, and commitment into action. With updates to this roadmap, we are building on our achievements to act with ever-greater

determination. We can and must do more if we hope to do our part, which is why our Office for Sustainability and the Presidential Committee on Sustainability led the development of these updates to the Plan together with students, faculty, and staff from across the University.

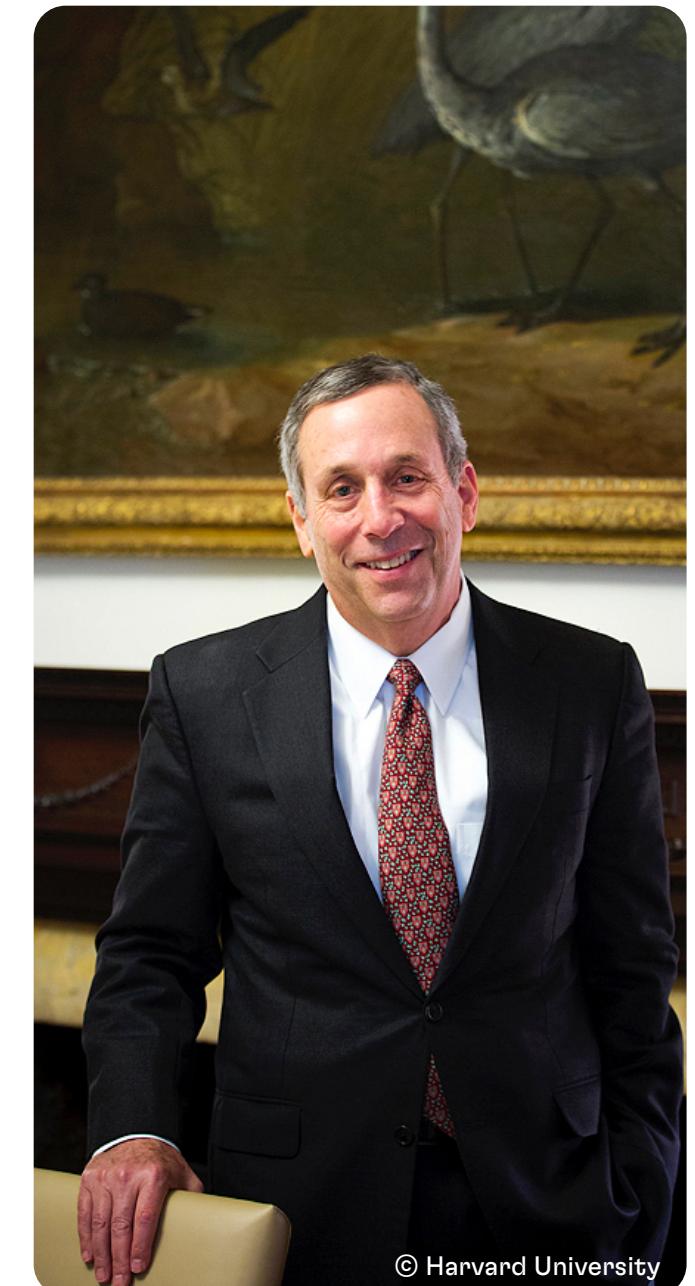
By sharing the actions and strategies through which we achieve our sustainability goals, our intention is to offer effective models for institutional operations that can be adopted by others. In the process, we can and will partner with and learn from others, further sustainable action around the globe, and amplify the solutions being generated by our faculty, researchers, and students. With our local communities, higher-education peers, and the private and nonprofit sectors, we will test and prove scalable solutions that contribute to a more sustainable world.

The work we do can—and should—define a sustainable future. Some of our efforts, including those of the Salata Institute

for Climate and Sustainability, will spark interdisciplinary thinking, drawing on Harvard's resources to enable cross-university research, teaching, and innovation. On another front, Harvard Management Company will leverage Harvard's financial assets to drive progress and accountability, having committed our endowment to achieve net-zero greenhouse gas emissions by 2050. These efforts align with and are in addition to the steps we are taking related to how we power, build, and operate, which is the major focus of this plan.

Each of us must play a role in this crucial endeavor. Our collaborative work will enable Harvard to meet its sustainability goals and to support the wellbeing of people and the planet—today and for generations to come.

Lawrence S. Bacow,
President, Harvard University



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Message from the Presidential Committee on Sustainability

Harvard aims to ensure the actions we take in pursuit of our mission are consistent with the internationally-articulated goal of sustainable development as the pursuit of inclusive wellbeing.

Harvard launched its first holistic Sustainability Plan in 2014, making it one of the first universities to define clear goals and targets across its organization. We have taken significant steps since then, including meeting our first climate goal in 2016.

The world has changed significantly since 2014, however. We must now consider the multiple overlapping and interconnected crises we all face—from intensifying climate change to significant biodiversity loss, persistent poverty and inequality, the proliferation of plastics and chemicals of concern, and the ongoing impacts of pandemics.

Sustainability is not just an environmental issue; it is a health and equity challenge too. The actions Harvard takes must be as interconnected as the challenges we face, which is why Harvard is taking steps to help protect the Earth's climate and environment, while simultaneously promoting the health and equitable wellbeing of people across generations and society.

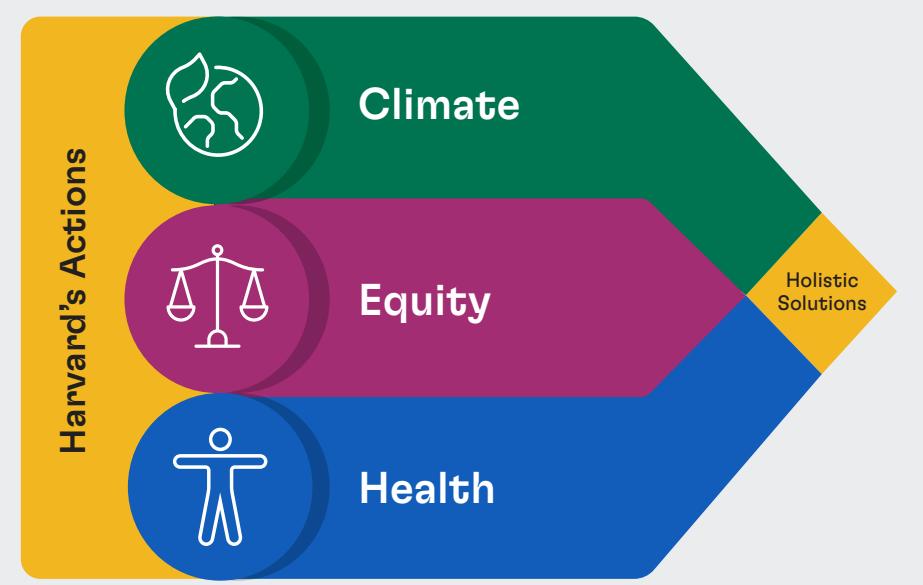
To ensure a healthy, safe, equitable, and resilient future, we have adopted a new and more ambitious agenda built on the latest research and lessons learned from implementing our first sustainability plan.

This new Sustainability Action Plan holistically integrates climate and the environment, societal equity,² and the health and wellbeing of people into the actions we take and how we measure success. It has been developed in close collaboration with faculty, students, staff, and other experts, including Harvard's Office for Equity, Diversity, Inclusion, and Belonging.³ Because climate change compounds environmental, equity, and health challenges in multiple interconnected ways, the Plan prioritizes initiatives to mitigate climate change.

Acting in this integrated way requires new ways of thinking and organizing ourselves and demands that we work collaboratively across disciplines to find innovative solutions. It means reimagining the systems and practices that shape how we power our communities, build and design our cities, produce our food, and move around. This new, more integrated approach to sustainability is an opportunity for Harvard to produce new research and make discoveries—which we will test, validate, scale, and share with others for maximum positive impact.

Accelerating action at the intersection of climate, equity, and health

Harvard's Actions



Presidential Committee on Sustainability leadership team

Jody Freeman
Archibald Cox
Professor of Law,
Harvard Law School;
Director of the
Environmental and
Energy Law Program,
Harvard Law School

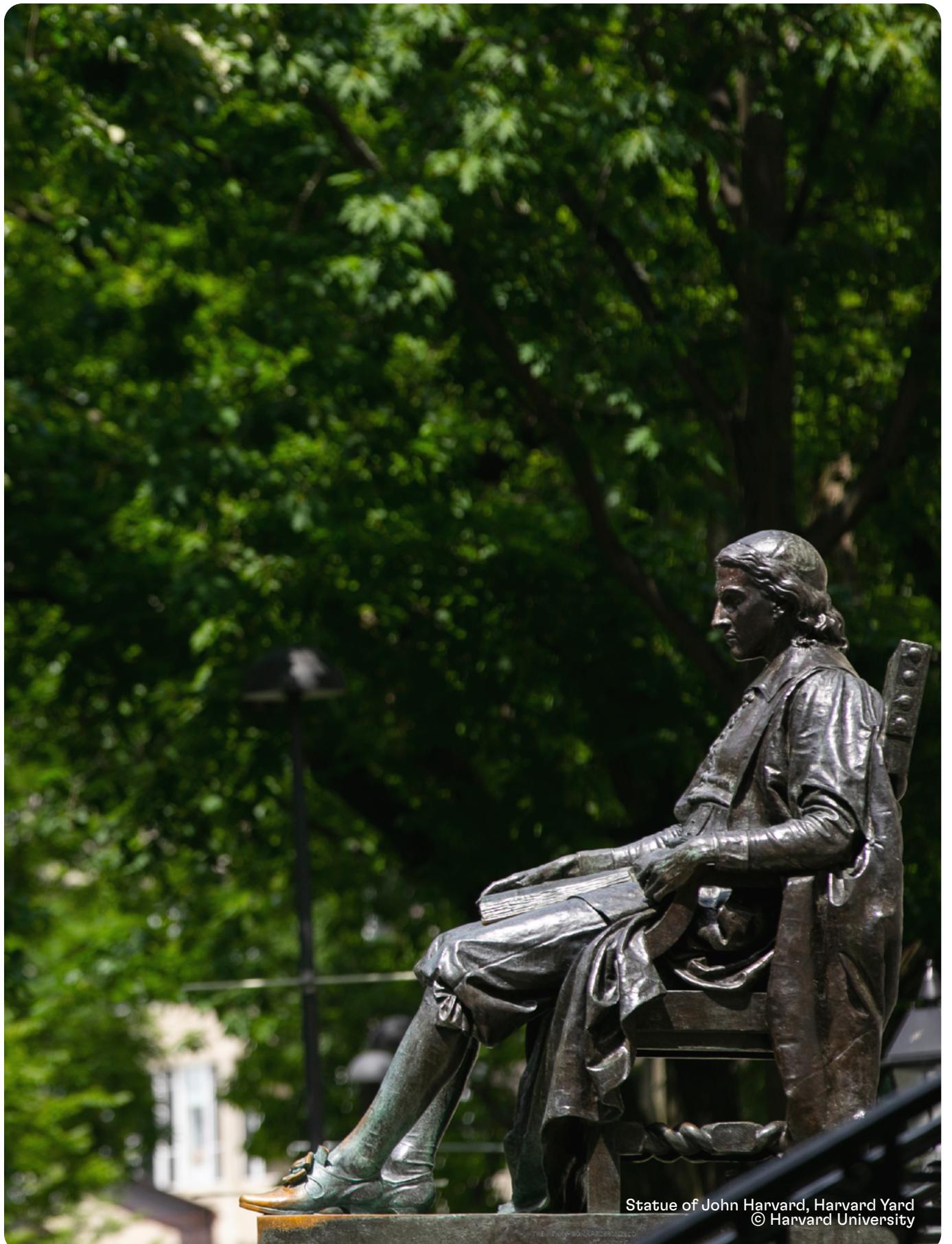
Heather Henriksen
Chief Sustainability
Officer, Harvard
University

Michael W. Toffel
Senator John
Heinz Professor
of Environmental
Management,
Harvard Business
School; Faculty
Chair of the
Business and
Environment
Initiative, Harvard
Business School

Meredith Weenick
Executive Vice
President,
Harvard University

2. Fair treatment, access, opportunity, and advancement for all, while at the same time striving to identify and eliminate barriers that have prevented the full participation of marginalized groups.

3. See Appendix for key questions that guide our actions to support climate, equity, and health.



Message from the Vice Provost for Climate and Sustainability

As the impacts of climate change intensify, we all – individually and institutionally – have a responsibility to redouble our efforts to reduce greenhouse gas emissions and advance sustainability. Our students, faculty, Harvard’s leaders, and the colleagues who make the University run are coming together to help meet the climate and sustainability challenge. The University’s Sustainability Action Plan is critical to that effort. It lays out concrete actions for reducing greenhouse gas emissions and improving sustainability, and models what large institutions can do to make progress.

While Harvard is adopting this new and dynamic sustainability plan, faculty across our campuses are forging new interdisciplinary collaborations that focus on some of the most challenging sustainability issues of our time. With support from the recently created Salata Institute for Climate and Sustainability at Harvard University, cross-School teams are initiating research into U.S. communities that are confronting the difficulties of the transition away from fossil fuels; the complex challenges of climate change adaptation in West Africa and South Asia; innovative solutions to reducing the emissions of methane, a potent greenhouse gas; and meaningful action by private firms that can help the United States and the rest of the world achieve their climate commitments.

Colleagues, too, including faculty and administrators, as well as students and alumni, are working in new ways to

strengthen climate education at Harvard. These efforts entail new curricular and cocurricular programs and collaborations, which seek to ensure that students and alumni are armed with the knowledge and skills they need to address the climate challenge, and that they are prepared to live and work on a planet with a changing climate. The seriousness and dedication that are fueling these efforts are both inspiring and consequential. One of the most innovative aspects of this Plan is using the University’s physical campus to experiment and pilot solutions.

The Harvard University Sustainability Action Plan provides the foundation for our continuing efforts to make a tangible difference in our own community.

James H. Stock,
Vice Provost for Climate and Sustainability
Director, The Salata Institute for Climate and Sustainability
Professor of Public Policy, Harvard Kennedy School; Harold Hitchings Burbank Professor of Political Economy, Faculty of Arts and Sciences

Key progress and achievements as of 2022

Building on a legacy of action to advance sustainability

144

As of 2022, Harvard had 144 LEED-certified buildings on campus, more than any other higher-education institution in the world.

218M gallons

As of 2021, Harvard's water use was down 35% from 2006 levels—or 218 million gallons, equivalent to filling Harvard's Blodgett Pool 291 times.

100+

Harvard's Office for Sustainability Grant Program has awarded more than 100 grants to student projects that use Harvard's campus as a living lab to create a sustainable community.



436,279 miles

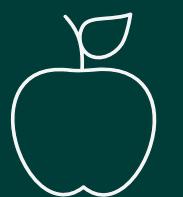
In 2022, more than 1,500 students and staff utilized the Harvard discounted membership of Bluebikes bikeshare, taking over 100,000 trips totaling 436,279 miles.

3MW

As of 2022, Harvard had installed 3 megawatts of solar panel capacity on campus, enough to power more than 250 homes.

\$12M

Harvard's \$12 million Green Revolving Fund provides capital for high-performance campus design, operations and maintenance. It has supported nearly 200 projects, yielding over \$4 million in energy savings annually.



16%

The shift toward plant-based foods as part of the Coolfood Pledge reduced greenhouse gas emissions per plate at Harvard by 16% between 2019 and 2021.

30%

Between 2006 and 2016, Harvard reduced greenhouse gas emissions 30% from 2006 levels, despite a 14% increase in the size of its campus during that same period.



Harvard community member renting a Bluebike in Cambridge, MA
© Harvard University

Harvard's sustainability mission

Accelerate the adoption of systems and practices that protect the climate and environment, advance a more equitable society, and promote the wellbeing of people at Harvard and beyond.



The motto “*Veritas*” or “truth” has adorned Harvard University’s shield for over 150 years. At Harvard, *veritas* is the reason that the University exists.

The pursuit of truth requires questioning and reimagining systems and practices. It requires humility and curiosity while not shying away from complexity. This same attitude is needed to advance sustainability.⁴

Harvard’s Sustainability Action Plan is a high-level vision and framework for institutional action. It takes a holistic approach to addressing climate change, the environment, equity, and health—treating them in an integrated and interconnected way, rather than as separate issues. This Plan prioritizes steps the University can take to promote inclusive wellbeing⁵ by addressing substantial past harms to which the University has contributed while making significant positive contributions of which we are uniquely capable.

Harvard’s pathway to impact: Advancing innovation for sustainability

To leverage our organization and its resources most effectively, Harvard will prioritize action that accelerates innovation in sustainability and lowers the barriers to adoption.

To achieve this, Harvard will invest in and support interdisciplinary collaboration and research to develop new knowledge. The University will turn this research into action, piloting new approaches, practices, and systems—and validating these models on campus and with partners. Our ambition is to advance systemic change on the climate and environment, equity, and health—developing groundbreaking solutions that can be applied and adopted at the University and beyond.

What are the barriers to advancing innovation for sustainability?

Barriers exist at every stage of the innovation process, including a lack of demand, discovery, invention, and efficient production; challenging adaptation across different contexts and uses; the need for culture shifts and new policy frameworks; the timely retirement of old systems, processes, and technologies; and underfunding.

Another critical challenge is overcoming **adoption gaps**. Harvard defines these as situations where barriers to the widespread adoption of a solution or system exist. Harvard is working to address adoption gaps by, for example, piloting solutions such as purchasing electric shuttle-buses and charging infrastructure; requiring healthier and sustainable building materials in projects; committing to reductions in food-related greenhouse gas emissions; and making energy systems cleaner.

Harvard’s role

Harvard is one organization among many working to advance impactful sustainability solutions

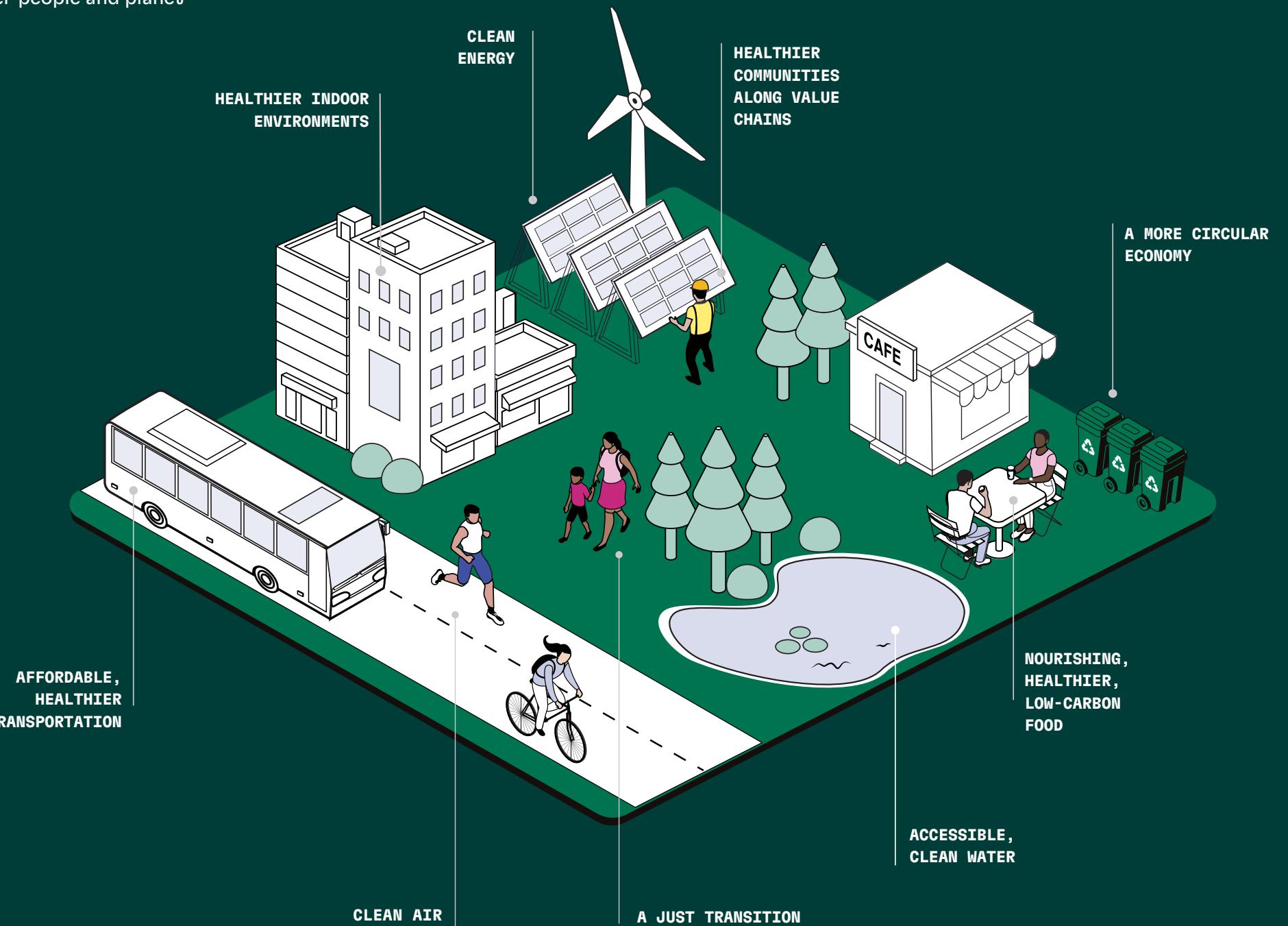


4. Harvard defines sustainability as: “Meeting the needs and aspirations of the present without compromising the ability of future generations to meet their own needs.”

5. Enhancing the present wellbeing of all people in ways that do not unfairly jeopardize the ability of people elsewhere or in the future to enhance their own wellbeing.

Harvard's vision of sustainability and intergenerational wellbeing

A more equitable society with healthier people and planet



Harvard envisions a world with...

ACCESSIBLE, CLEAN WATER

Water is treated as the precious resource it is, through reduced and responsible use.

CLEAN AIR

The air is free from pollutants caused by fossil fuels, improving everyone's health while advancing equity. Clean air has a positive impact for everyone, particularly those in structurally disadvantaged communities and those near fossil-fuel and chemical plants.

HEALTHIER INDOOR ENVIRONMENTS

Indoor air quality is prioritized. Surfaces are free from harmful classes of chemicals in interior construction materials and furnishings, meaning upstream and downstream communities along the value chain⁶ are less likely to be exposed to toxic chemicals.

CLEAN ENERGY

Reliable, fossil fuel-free energy provides heating, cooling, and electricity, while buildings, old and new, are equipped with energy-efficient systems.

NOURISHING, HEALTHIER, LOW-CARBON FOOD

Nutritious, low-carbon food is accessible to all, and food waste is drastically reduced, with more food donated, composted, and converted to energy.

AFFORDABLE, HEALTHIER TRANSPORTATION

Public transportation is affordable, accessible, convenient, and powered by renewable sources. Bike-sharing programs, pedestrian corridors, and multimodal options offer safe and appealing sustainable transit.

A JUST TRANSITION

Equity is a key lens that guides decision-making, putting people and communities at the center of the transition to a more sustainable future—ensuring everyone can thrive.

A MORE CIRCULAR ECONOMY

The concept of waste is transformed, with materials continually looped back into the value chain as a resource—reducing the need for raw materials.

HEALTHIER COMMUNITIES ALONG VALUE CHAINS

Purchasing decisions consider climate, equity, and health to protect the planet and enhance the wellbeing of people all along the value chain.

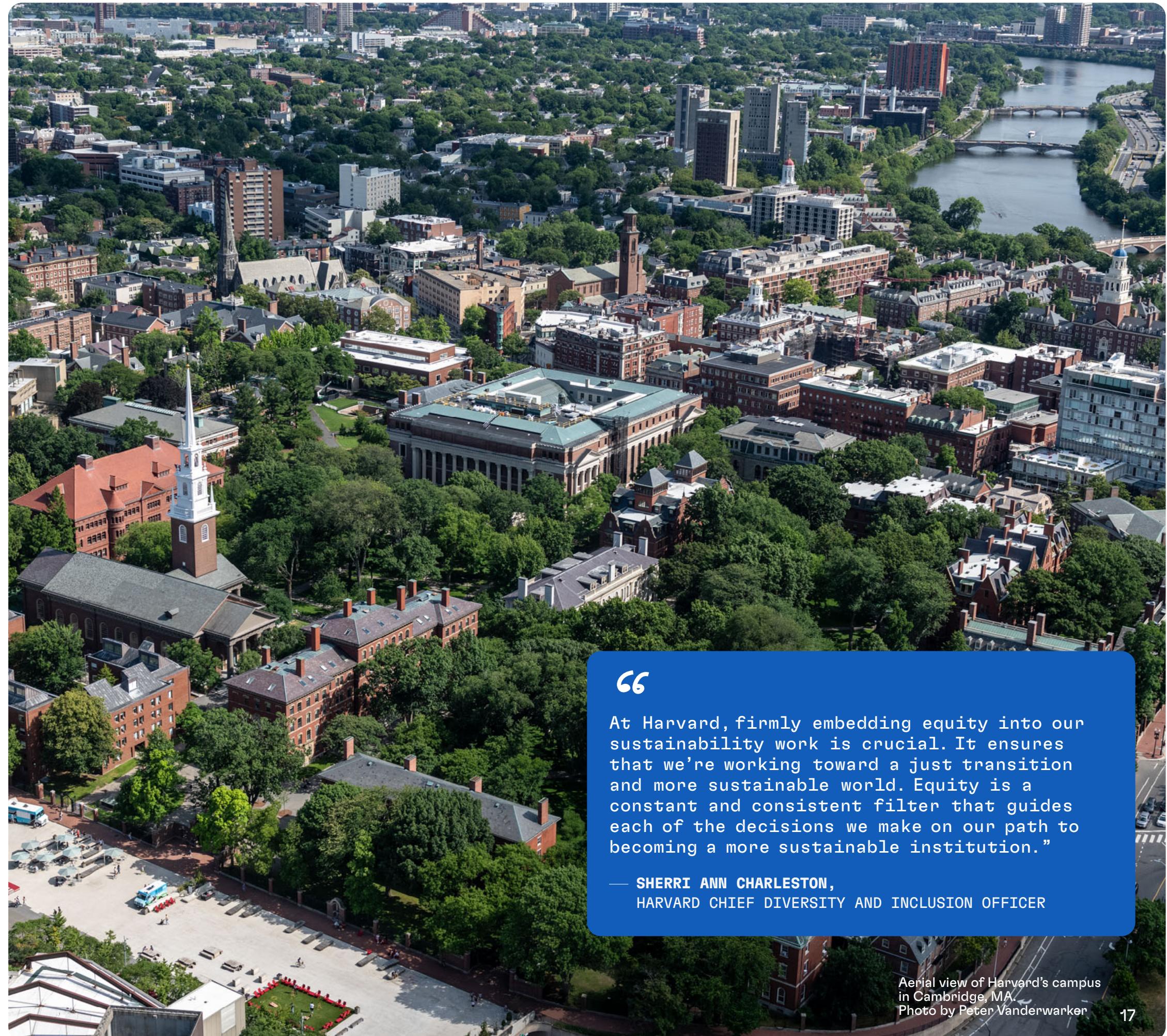
6. A value chain is the full life cycle of a product or process, including material sourcing, production, procurement, consumption, and disposal and recycling.

Harvard's plan of action

Harvard has a responsibility and opportunity to leverage the organization's resources to address past adverse impacts and accelerate positive action on sustainability. The University will strive to integrate climate and the environment, equity, and health considerations into decision-making at all levels, while also developing ways to track progress on all three measures.

Drawing on more than three decades of work to advance sustainability at Harvard, the University will engage its faculty, students, and staff across its Schools, Institutes and Business Units—more than 50,000 people—to continue to leverage Harvard's campus as a living laboratory: inventing, testing, and validating new systems and practices. The University will pursue new methods and approaches that improve the wellbeing of the Harvard community and can be scaled to benefit wider society. Working with Harvard's more than 400,000 alumni, we will forge new partnerships in the public and private sectors to advance and scale this work.

Together, we will reimagine and redefine how we power, how we build, how we operate, and how we lead.



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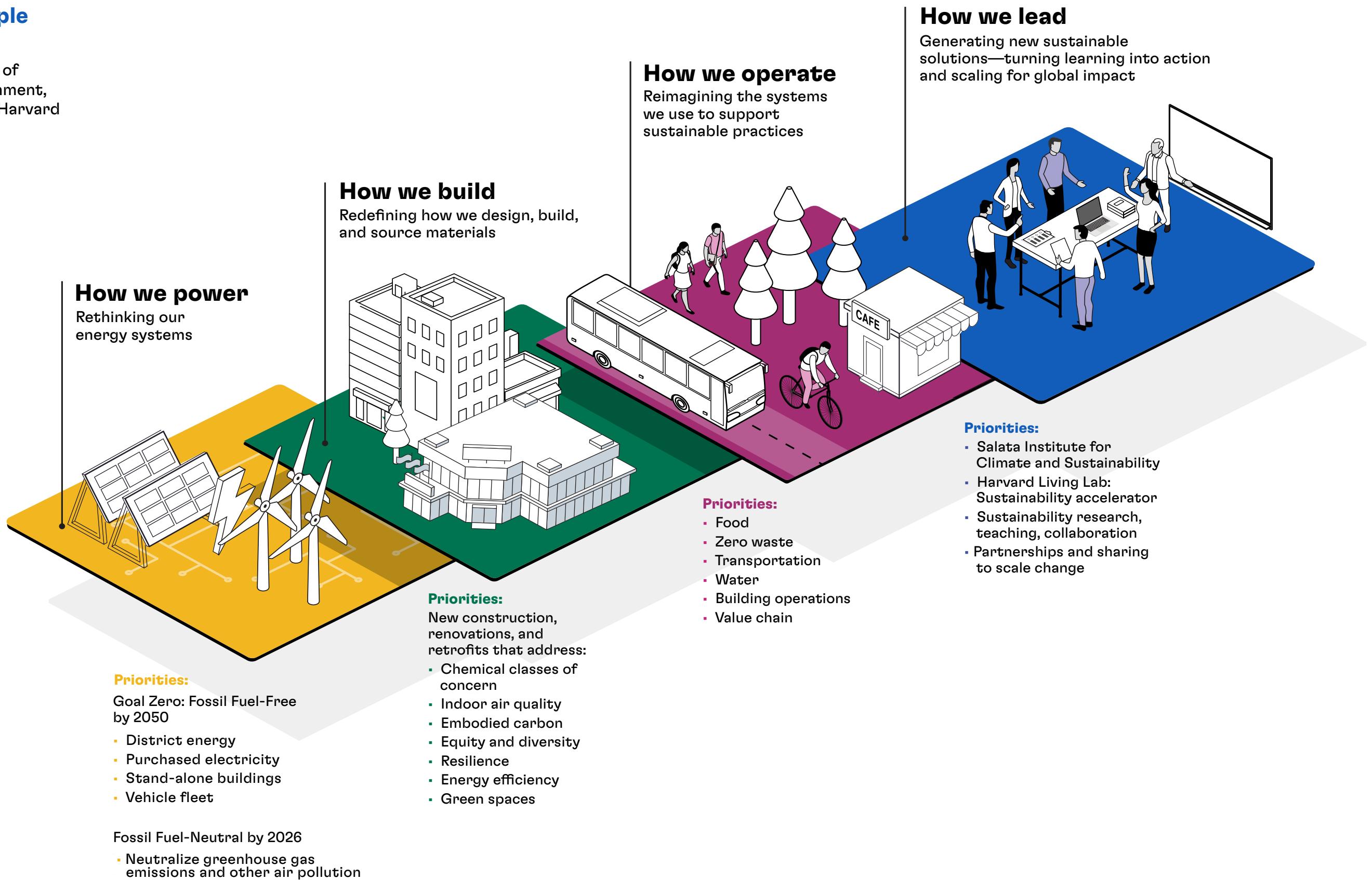
At Harvard, firmly embedding equity into our sustainability work is crucial. It ensures that we're working toward a just transition and more sustainable world. Equity is a constant and consistent filter that guides each of the decisions we make on our path to becoming a more sustainable institution.”

— SHERRI ANN CHARLESTON,
HARVARD CHIEF DIVERSITY AND INCLUSION OFFICER

Aerial view of Harvard's campus in Cambridge, MA.
Photo by Peter Vanderwarker

Advancing sustainability at Harvard for healthier people and planet

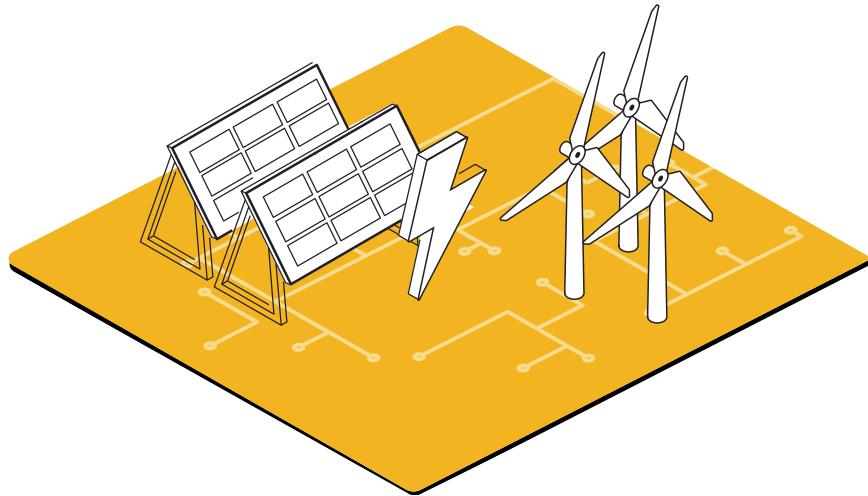
Through the lenses of climate and environment, equity, and health, Harvard is transforming:



How we power



Solar panels on a
Harvard rooftop
© Harvard University



Harvard is accelerating a fossil fuel-free world

Harvard is focused on accelerating the adoption of clean energy and completely transitioning away from fossil fuels—creating a model for a healthier, decarbonized world.

WHY HARVARD IS TAKING THIS ON

Burning fossil fuels is the primary driver of climate change. The use of fossil fuels pollutes the air and water—damaging human health and disproportionately harming vulnerable communities.⁷ Focusing on addressing the wider harmful impacts of fossil fuels, rather than only greenhouse gas emissions, enables Harvard to drive progress across climate, equity, and health. This work, both on the supply and demand sides, will improve environmental quality and public health, and strengthen ecosystems on campus and in the local community. It will also improve the wellbeing of workers and communities along our value chain.

→ KEY PRIORITIES

Goal Zero: A fossil fuel-free Harvard

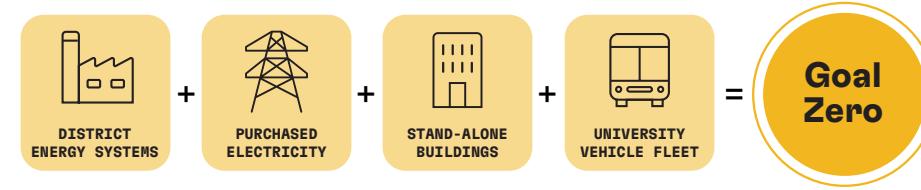
In 2018, Harvard set a goal to be fossil fuel-free by 2050. This goal is more ambitious than simply becoming “carbon neutral,” which means implementing offset projects like investing in new renewable energy and planting trees to absorb equivalent amounts of carbon emitted.

Goal Zero is focused on eliminating the use of fossil fuels—to the point where offsets are no longer needed. By recognizing the full set of damages caused by our use of fossil fuels, rather

than only carbon emissions, Harvard is seeking to reduce the negative health impacts of fossil fuel use and production. We also aim to reduce plastics and toxic chemicals, which contain fossil fuels as main ingredients, as a part of our mission to decrease waste and create a healthier value chain.

Fossil Fuel-Free by 2050

OBJECTIVE: Harvard aims to reach Goal Zero by using fossil fuel-free power across campus operations in terms of both direct emissions (Scope 1)⁸ and indirect emissions (Scope 2)⁹, without using offsets.



– Eliminate onsite fossil fuel emissions from district energy systems

A key challenge Harvard faces in achieving Goal Zero is that the University owns and operates district energy systems that provide heating and cooling to support research and discovery in hundreds of buildings. These central systems currently run on fossil fuels and will need to be fossil fuel-free by 2050. These small power plants will require large capital investments, disruptive infrastructure improvements, and innovative technology to transition to fossil fuel-free energy sources, such as electrification with 100% renewable electricity procurement, green hydrogen, or other future technology solutions. Ultimately a clean electricity grid is also essential.

OBJECTIVE: Eliminate onsite fossil fuel emissions from district energy systems.

– Procure 100% fossil fuel-free electricity

OBJECTIVE: Procure 100% of Harvard's electricity from fossil fuel-free energy sources connected to the New England electricity grid. As a bridging strategy to become fossil fuel-free, Harvard will contract for renewable energy projects to reduce carbon emissions and other air pollution, even if some projects are located outside New England, to become fossil fuel-neutral by 2026.

Harvard's plan to address climate change

Harvard has developed a holistic plan that includes our fossil fuel-free goal (Scopes 1 and 2) and a focus on reducing value-chain emissions (Scope 3),¹⁰ encompassing the University's direct and indirect emissions. Elements of this plan can be found throughout this document.

More information on Harvard's value-chain emissions can be found in the “How we operate” section of this plan, starting on page 30.



Harvard community member inspecting solar panels on a University rooftop
© Harvard University

- Eliminate onsite fossil fuel emissions from stand-alone buildings

OBJECTIVE: Harvard has hundreds of stand-alone buildings that contain fossil fuel infrastructure, e.g., natural gas boilers, water heaters, and natural gas appliances in kitchens. The systems in these buildings will need to be electrified and powered by zero-emissions electricity by 2050.

- Eliminate fossil fuel emissions from University vehicle fleet

OBJECTIVE: Harvard will electrify its owned and operated vehicle fleet and power these vehicles with zero-emissions electricity. See the “How we operate” section for more information.

- Reduce energy demand in buildings and district energy systems

OBJECTIVE: Harvard will continue to prioritize opportunities for energy efficiency and to reduce demand from district energy systems, purchased electricity, stand-alone buildings, and University vehicles. See the “How we build” and “How we operate” sections for more information.

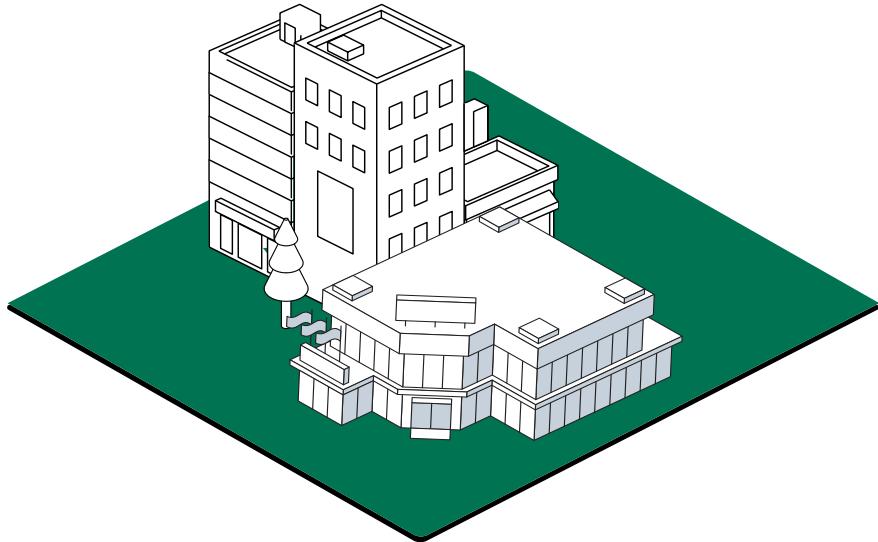
Fossil Fuel-Neutral by 2026

OBJECTIVE: As a bridge to reach Goal Zero, Harvard has a short-term objective to be fossil fuel-neutral by 2026. This means Harvard will zero out campus emissions (Scope 1 and Scope 2). It also means funding projects that zero out both greenhouse gas emissions and the health impacts from our use of fossil fuels, such as those caused by air pollution, to create positive benefits for human health, social equity, and ecosystems.



One of Harvard's new 100% electric buses
© Harvard University

How we build



Harvard is accelerating sustainable building

Harvard is accelerating sustainable building to enhance the health, productivity, equity, and quality of life on campus, as well as for people along our value chain and in their communities. Through sustainable design, construction, sourcing, and operation of our buildings and landscapes, the University will help foster a flourishing community on campus and globally.

WHY HARVARD IS TAKING THIS ON

The built environment is ripe for reimagination and innovation. Globally, buildings and the built environment put the health of people and the natural environment at risk, accounting for [more than one-third](#) of all global energy-related carbon emissions in 2021. At Harvard, heating, cooling and powering buildings account for 97% of the University's Scope 1 and 2 emissions. In addition, indoor air quality is crucial for human health and cognition, and can play a leading role in reducing the transmission of disease. Around 80,000 industrial chemicals are in use in the U.S., only a few of which are federally regulated. Building and construction materials often contain chemicals of concern that are linked with significant health risks.

Launched in 2016, the [Harvard Healthier Building Academy](#) (HHBA), is a partnership led by the Office for Sustainability together with researchers from the Harvard T. H. Chan School of Public Health, John A. Paulson School of Engineering and Applied Sciences, and Harvard Medical School. The mission of the HHBA is to identify and reduce "chemical classes of concern" (many derived from petrochemicals) that pose health risks along the value chain, and whose production involves significant amounts of carbon emissions.

→ KEY PRIORITIES

Build sustainably

Developed in 2007 and updated every few years, [Harvard's Sustainable Building Standards](#) incorporate holistic requirements for significant emissions reductions, better indoor air quality, healthier and more sustainable materials, improved equity and accessibility, and healthier high-performance design into University buildings, capital projects, campus planning, and ongoing building operations.

OBJECTIVE: Advance and strengthen Harvard's Sustainable Building Standards and ensure major new construction and renovations continue to follow them, establishing a high bar for climate, equity, health, and resiliency in the built environment and along the value chain.

Remove harmful chemicals from building materials

Harvard has required building project teams to reduce and eliminate the use of harmful classes of chemicals since 2014, leveraging the research of Harvard faculty and other experts through the HHBA. Harvard's Sustainable Building Standards currently require project teams to avoid multiple classes of chemicals (beyond lists of individual chemicals), including per- and polyfluoroalkyl substances (PFAS), chemical flame retardants, and antimicrobials, across 14 key interior product categories. Harvard is working with vendors and suppliers, leveraging University purchasing power, to accelerate the transition to healthier building materials and more transparent supply chains. The University is taking responsibility for the impacts of its value chain and sending a signal to markets by creating new standards that prioritize and protect the Harvard community, as well as workers and communities along the value chain.

OBJECTIVE: Continue removing harmful classes of chemicals, such as PFAS, from Harvard's value chain and incorporate new classes of chemicals of concern and product categories into the Sustainable Building Standards as new research, third-party certifications, and innovations emerge. Continue to educate project teams, partner to innovate, share solutions, and send market signals for a healthier sustainable built environment for all.



At Harvard, building operations are a top priority because they account for the vast majority of the University's direct emissions.

4M sq ft

Harvard has required the use of healthier materials across the University, removing harmful chemicals of concern across 4 million square feet of campus.



Harvard community member harvesting vegetables on a campus green roof
© Harvard University

Reduce embodied carbon in construction

Embodied carbon refers to the greenhouse gas emissions created by manufacturing, transportation, installation, maintenance, and disposal of building materials, such as concrete and steel. The University is taking action to mitigate embodied carbon, while avoiding unintended consequences that negatively impact health and equity.

OBJECTIVE: Reduce embodied carbon in the primary materials used in new construction and major renovations at Harvard by a minimum of 20% by 2024, compared to conventional buildings. Harvard sees climate and health as inextricably linked and will balance embodied carbon reduction with health to advance innovation and holistic solutions along the value chain.

Advance equity and diversity in the value chain

Harvard's Construction Inclusion Plan sets standards that promote workforce and contracting opportunities in construction, particularly for female and minority-owned businesses.

OBJECTIVE: Advance equity and diversity in Harvard's value chain by tracking progress toward internal targets to increase the proportion of contracts with historically underrepresented business enterprises (UBEs) in building projects.

Strengthen campus resilience

At Harvard, all major capital projects are currently designed using local and regional data to minimize and manage future climate impacts, such as floods, storm surges, increased precipitation, extreme heat, and temperature fluctuations.

OBJECTIVE: Conduct a University-wide climate vulnerability study to enable Harvard to take a campus-level approach to risk mitigation and future-proofing in support of a healthier community, in addition to the current practice of conducting and acting on project-level and area-level studies.

Expand and enhance campus green and open spaces

Harvard's green spaces, including Harvard Forest, Arnold Arboretum, Harvard Yard, and building rooftop gardens serve as living labs where the community can learn and conduct research. These natural assets are critical for lowering heat and air pollution, fostering biodiversity, managing stormwater, encouraging walking, and sequestering carbon. Harvard evaluates all new landscape designs and capital projects to ensure they advance University sustainability goals. Harvard's Enterprise Research Campus in Allston will include a major greenway to connect the Honan-Allston Library and Rena Park toward the Charles River, providing publicly accessible open space to the local community in Allston and the greater Boston area.

OBJECTIVES:

- Continue to preserve and enhance campus open spaces and landscape elements, identifying opportunities to increase green space on campus and the wellbeing and resiliency of the local community and environment.
- Expand the 7,700-tree inventory on campus through landscape maintenance and capital projects, and continue to sustainably manage Harvard's robust urban tree canopy.

Build net zero emissions buildings and provide capital for energy efficiency

Energy and emissions targets in Harvard's Sustainable Building Standards remain above energy code. Through its [Green Revolving Fund](#), Harvard is helping support seed funding for high-performance campus design, operations, and maintenance projects. Currently funded at \$12 million, this fund provides capital for projects that reduce energy use and advance sustainability.

OBJECTIVES:

- Continue to update energy and emissions targets for new construction and renovation projects in Harvard's Sustainable Building Standards. New construction projects will be net zero without new onsite fossil fuel infrastructure for heating and cooling.
- Continue to leverage the latest research and thinking by investing in pilot projects through the Green Revolving Fund, the Campus Sustainability Innovation Fund, and green bonds, and explore new financial models to drive innovation.

18K

Harvard is the steward of approximately 18,000 local trees and maintains an inventory of tree resources that contains information on the 7,700 trees located on Harvard's campuses in Cambridge and Boston.

\$12M

The Green Revolving Fund, with \$12 million in funding, provides capital for projects that reduce energy use and drive sustainability innovation.



Harvard's Science and Engineering Complex © Harvard University

Sustainable building in action: Harvard's Science and Engineering Complex

Completed in 2021, Harvard's Science and Engineering Complex (SEC) has been certified as one of the healthiest, most sustainable, and energy-efficient laboratories in the world. The SEC was awarded the Living Building Challenge Petal for Materials, Beauty, and Equity, and LEED Platinum certification. An interdisciplinary collaboration between faculty, students, architects, sustainability experts, engineers, and manufacturers, the complex is the epitome of Harvard's new vision for sustainable building. The SEC supports climate and the environment, equity, and health with positive impacts for occupants—such as optimized indoor air quality—and everyone along the value chain, including in the communities where building materials were manufactured.

During construction, the University evaluated over 6,000 building materials, testing many—from pipes to furniture and flooring to lighting fixtures—to identify and address classes of chemicals of concern.

Our teams worked with manufacturers and designers to create safer global supply chains, with 1,200 companies publicly disclosing the ingredients in their products and creating labels to help others make healthier decisions.

As a result, many manufacturing partners permanently reformulated their products to remove harmful classes of chemicals not just for Harvard, but for all customers. This achieved the SEC project team's goal to help send clear market signals to make healthier, lower-carbon, more sustainable products available for all.

With a firm foundation in Harvard research, the SEC, with its innovative construction methods, is not only a successful demonstration project and blueprint for others, but also helped influence the market to create better, healthier buildings today and for future generations.

How we operate



Harvard is accelerating new systems for low-impact living

Harvard is enabling healthier, low-carbon living—creating systems that can be scaled and adopted more broadly.

WHY HARVARD IS TAKING THIS ON

The systems that form the foundations of how we live—from how we get around to how we eat—often perpetuate unsustainable practices. For example, if food waste were a nation, it would be the [third-largest emitter](#) of greenhouse gases, after the United States and China. Yet, [more than 34 million Americans](#) are food insecure, lacking access to healthy nourishing food. Across the globe, transportation accounts for [37% of CO₂ emissions from end-use sectors](#). Harvard is approaching these challenges by developing new systems and practices, and modeling sustainable operations that lead to healthier, more equitable communities.

“

Reexamining our food systems is a pivotal step in helping New York City reach its climate goals. That's why in 2021 the City became a signatory of the Coolfood Pledge. Harvard's leadership as a founding signatory on the Pledge was a strong vote of confidence that inspired us to incorporate it into the City's climate playbook.”

— ERIC ADAMS, MAYOR, NEW YORK CITY

→ KEY PRIORITIES

Rethink food systems

First published in 2019, Harvard's holistic [Sustainable and Healthful Food Standards](#) are designed to ensure the University is advancing sustainability and food-system education, while providing food choices that are healthier for people and the planet. These standards hold Harvard's food-service vendors accountable for making continuous progress across areas such as climate and ecosystems, consumer wellbeing, education and food literacy, food-waste reduction, animal welfare, and the wellbeing of workers and communities along the value chain. Harvard was also an inaugural signatory of the [Coolfood Pledge](#) in 2019.

OBJECTIVE: Reduce greenhouse gas emissions from food by 25% by 2030, enabling and supporting sustainable food systems, reducing food waste, while continuing to implement Harvard's Sustainable and Healthful Food Standards.

Accelerate a zero-waste future

Harvard is taking a systemic approach to waste prevention and reduction, aiming to ensure the materials that the University purchases and handles are used effectively and for as long as possible. Harvard is also strategically preventing waste throughout our value chain, while minimizing on-campus municipal solid waste (or trash) and sustainably managing other waste streams, including plastics, recyclables, and organics, as well as construction, demolition, and hazardous waste.

OBJECTIVE: Measure and report data annually for Harvard's major waste streams and develop a strategic zero-waste plan by the end of 2024, including guidance and resources to help Schools and Business Units create their own zero-waste plans and goals.



Animal agriculture provides only 18% of calories and 37% of protein globally, but uses 83% of farmland and contributes 58% of food-related greenhouse gas emissions.



Harvard community members setting up recycling stations for commencement
© Harvard University



Reimagine transportation systems

The University is developing and investing in [sustainable modes of transportation](#), ensuring that walking, cycling, and public transport are safe, affordable, and accessible. By fall 2021, Harvard had transitioned one-third of its shuttle-bus fleet to 100% electric and installed more than 50 electric vehicle charging stations for the community.

OBJECTIVES:

- Complete the transition of Harvard’s shuttle-bus fleet to electric by 2035 and set new target dates for its remaining fleet vehicle types by the end of 2026, as part of the University’s commitment to be fossil fuel-free by 2050. This roadmap will include an outline for installing more charging infrastructure for University vehicles and equipment.
- Maintain at least gold-level status in the League of American Bicyclists’ [Bicycle Friendly University Program](#), which evaluates whether universities are effectively encouraging bicycling and protecting cyclists’ rights.
- Support and enhance the pedestrian experience and sufficiently accommodate other personal transportation, such as [Bluebikes](#), e-bikes, and scooters.
- Continuously improve sustainable transportation opportunities, programs, and incentives for Harvard affiliates.

Increase water efficiency and mitigate water pollution

Harvard aims to further reduce University-wide potable water use, incorporating new requirements into Harvard’s Sustainable Building Standards and [Sustainable Site Maintenance Standards](#) for landscaping. Harvard will also continue to sustainably manage its on-campus stormwater and runoff, while leveraging research related to water pollution and public health, such as the dangers of per- and polyfluoroalkyl substances (PFAS), to inform purchasing decisions that can have impacts along the value chain.

OBJECTIVE: Conduct a holistic water impact assessment to help prioritize which additional strategic investments should be made to further reduce potable water use and reduce water pollution on campus and along the value chain.

Improve building energy efficiency

Since Harvard set its first climate goal in 2008, its building managers and facilities teams have been reducing the energy demand in campus buildings. Increasingly, these teams are achieving deeper reductions by implementing innovative energy-efficiency measures and undertaking ongoing commissioning projects to optimize building performance.

OBJECTIVE: Continue to prioritize the identification and strategic implementation of energy-efficiency and demand-management opportunities in Harvard’s existing buildings, such as through heat-recovery systems, recommissioning, energy audits, and weatherization.

Advance sustainability through building operations

Constructing new buildings with sustainability in mind is only part of the equation. Managing and operating Harvard’s over 650 buildings while addressing climate, equity, and health is also key to reducing Harvard’s impact.

OBJECTIVE: Building and facilities managers will advance sustainability through effective and innovative management of the built environment, such as leveraging building system fault detection and analytics, deferred maintenance programs, and best practices for maintaining lab research equipment.

Develop a holistic approach to sourcing

Harvard’s purchasing decisions have an impact on climate and the environment, social equity, and the wellbeing of people and communities along the value chain. Therefore, Harvard has a responsibility to act. In 2020, Harvard’s Office for Sustainability, in partnership with Strategic Procurement and procurement teams across Schools and Business Units, created a [Sustainable Purchasing Guide](#), which prioritizes climate, equity, and health—along with waste minimization. Harvard negotiates with vendors for University-wide terms, regularly assessing suppliers to ensure they align with our sustainability goals and values.

OBJECTIVE: Develop a strategy to integrate climate-related factors—such as value-chain emissions (Scope 3)—equity, health, and waste minimization into purchasing decisions, vendor selection, and vendor management.



Harvard community member inspecting University rooftop solar panels
© Harvard University

Value-chain emissions (Scope 3): Beyond the University's direct emissions

To reduce Harvard's greenhouse gas emissions, the University is addressing its operational emissions from heating, cooling, electricity, and fueling the University vehicle fleet—which are known as Scope 1 and Scope 2 emissions. Harvard's other priority is to address the University's value-chain emissions caused by activities such as construction, business travel, food, and purchasing, known as Scope 3 emissions.

Harvard's value-chain emissions

Like many similar institutions, Harvard's indirect value-chain emissions are several times larger—an estimated 7-10 times larger depending on the year—than its Scope 1 and 2 emissions. Harvard evaluated its emissions to identify the most carbon-intensive activities where the University could have the largest impact.

HARVARD IS PRIORITIZING ACTION ON:

Capital goods

Emissions from producing construction materials such as cement and steel (also known as “embodied carbon”).

Business travel and commuting

Emissions from commuting and business travel, particularly air travel of our faculty, staff, and students.

Food

Emissions from the purchase of food served across our dining halls, cafeterias, and catering operations.

Other purchased goods and services

Emissions from the production of procured supplies such as plastics, electronics, and furniture.

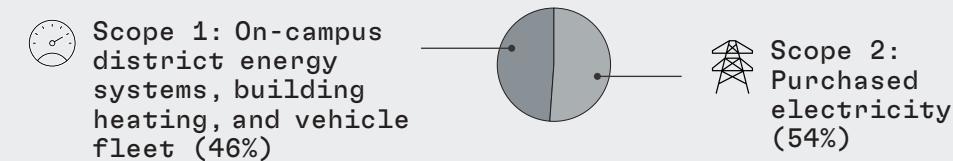
Harvard is leveraging its purchasing and convening power with suppliers to better understand how to reduce value-chain emissions and set meaningful goals and targets.

Harvard's greenhouse gas emissions

Harvard's Scope 3 emissions are an estimated 7-10 times larger than the University's Scope 1 & 2 emissions

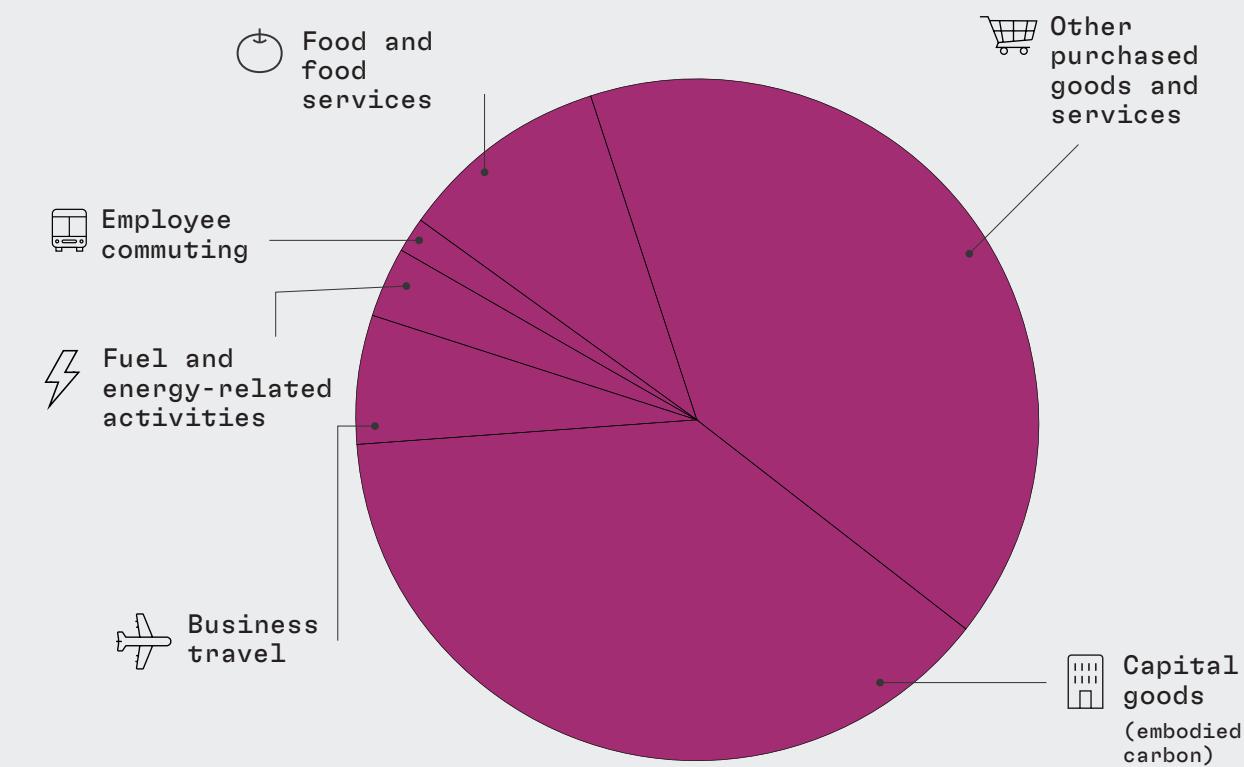
Scope 1 and 2 Emissions

Based on 2022 data



Scope 3: Value-Chain Emissions

A high-level analysis from 2017 helped Harvard identify and estimate key areas to prioritize for greatest impact



How we lead



Harvard is accelerating action on sustainability and climate through research and teaching

Harvard will generate and leverage innovative knowledge to advance solutions to the climate crisis and sustainable development. Harvard will invest in transdisciplinary research and creating scalable models that support wellbeing and equity on campus and beyond.

WHY HARVARD IS TAKING THIS ON

Harvard principally influences the world through its research and teaching. Across Schools, disciplines, fields, and practices, Harvard is working to generate new knowledge and develop holistic, scalable, and economically viable new solutions that accelerate positive change. Harvard will convene new partnerships, leveraging its resources to take risks others cannot to remove barriers to adoption, pilot new systems and practices, and publish blueprints for others to use. Through research and teaching, Harvard University will prepare the sustainability leaders of tomorrow, while collaborating with Harvard alumni to enable them to be sustainability change-makers today.



Launch ceremony of Harvard's Salata Institute for Climate and Sustainability
© Harvard University

→ KEY PRIORITIES

The Salata Institute for Climate and Sustainability

The centerpiece of Harvard's climate- and sustainability-focused research, teaching, and engagement is the [Salata Institute](#) for Climate and Sustainability. Launched in fall 2022 with a \$200 million gift from Melanie and Jean Salata, the Salata Institute for Climate and Sustainability serves as a fulcrum for collaboration across Harvard's many areas of expertise, pursuing practical, real-world solutions that address all aspects of the climate crisis.

OBJECTIVE: The mission of the Salata Institute is to develop and promote durable, effective, and equitable solutions to the climate change challenges confronting humanity. The Institute has launched several new, University-wide initiatives in service of this mission, including faculty-led, interdisciplinary Climate Research Clusters seeking to produce useful and practical climate solutions.

Presidential Committee on Sustainability

The Presidential Committee on Sustainability (PCS), co-chaired by two faculty members and Harvard's Executive Vice President, and managed by the Office for Sustainability, was launched in 2019 to advise Harvard's President and leadership on the University's sustainability priorities, vision, goals, strategy, and partnerships. Aiming to ensure that these are grounded in the latest research and thinking, the committee advises on how Harvard's sustainability leadership and convening power can be leveraged and scaled to have the greatest impact beyond our campus through partnerships with cities, leading businesses, education institutions, and nonprofit organizations.

Harvard Living Lab: Sustainability accelerator

Harvard is bringing its students, faculty, and staff together to unlock the campus's potential as a test bed and living lab. It is incubating, piloting, and accelerating transformative new ideas on campus and with partners to test and validate innovative solutions.

OBJECTIVE: Our community will continue to work on-the-ground and across disciplines, generating new discoveries that can be replicated and applied locally, regionally, nationally, and globally.

“

The Salata Institute for Climate and Sustainability represents a once-in-a-generation opportunity to tackle the climate crisis by leveraging and unifying Harvard's strengths. It will draw together expertise from across the University in ways we've only just begun to imagine.”

LAWRENCE S. BACOW,
PRESIDENT, HARVARD
UNIVERSITY

“

Harvard can, and must, play a role in not only creating innovations for a sustainable future, but also building the moral imagination for change. We can leverage both the arts and the sciences to create a bold vision of the future, while innovating to achieve that vision—accelerating the change the world needs.”

—
RAKESH KHURANA,
DANOFF DEAN,
HARVARD COLLEGE

Student Sustainability Leadership

Harvard has a variety of programs that engage students in sustainability action. For instance, the [Council of Student Sustainability Leaders](#) (CSSL), managed by the Harvard Office for Sustainability, comprises Harvard graduate and undergraduate students who lead and are involved in sustainability-related student groups on campus.

OBJECTIVE: Students will continue to provide feedback and recommendations on Harvard’s overall sustainability strategy and collaboratively lead projects to advance the University’s sustainability vision and priorities.

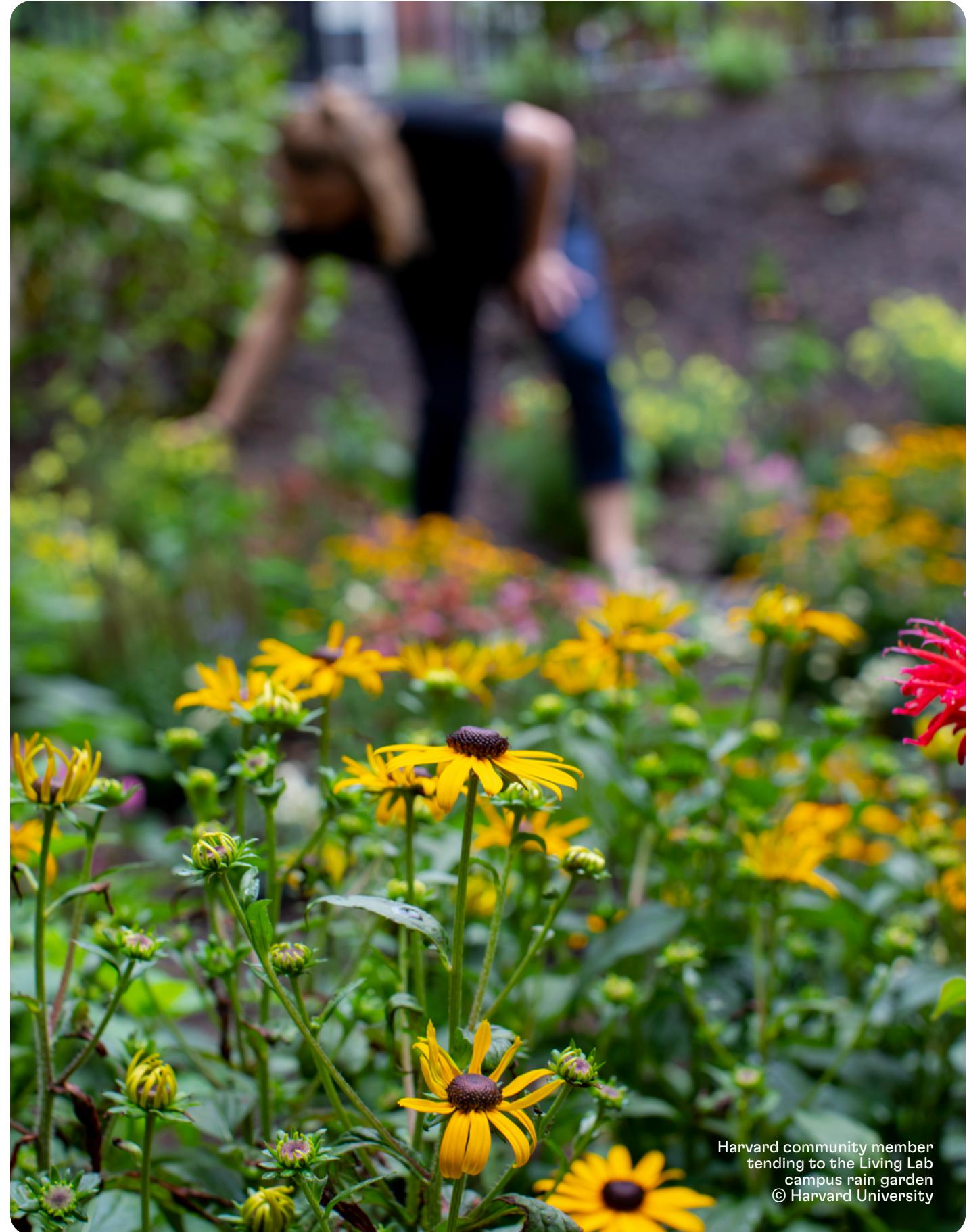
Harvard Innovation Labs

[Harvard Innovation Labs](#) (i-lab) is an ecosystem that supports Harvard students and select alumni as they explore the world of innovation and entrepreneurship. Its Climate Entrepreneurs Circle is a selective incubation program for the next generation of climate entrepreneurs who are actively uncovering new, unexpected ways to take on climate change.

OBJECTIVE: Going forward, i-lab aims to triple the number of climate ventures it supports and deepen the resources it provides to support climate entrepreneurs.

External partnerships

OBJECTIVE: Harvard will continue to lead and engage with many local, regional, national, and international partners—including Cambridge and Boston, private companies and nonprofit organizations, and other higher-education institutions—to amplify and scale up solutions, learn from others, and collectively share knowledge.



Harvard community member
tending to the Living Lab
campus rain garden
© Harvard University

Summary of Harvard's objectives

Through the lenses of climate, equity, and health, Harvard is transforming:

How
we
power

GOAL ZERO: FOSSIL FUEL-FREE BY 2050

Use zero fossil fuels across campus, eliminating both direct and indirect emissions without the use of offsets.

FOSSIL FUEL-NEUTRAL BY 2026

Zero out campus emissions (Scope 1 and Scope 2) through renewable energy purchases and projects that zero out the greenhouse gas emissions and the health impacts from other pollution resulting from Harvard's use of fossil fuels.

ELIMINATE ONSITE FOSSIL FUEL EMISSIONS

Harvard will eliminate onsite fossil fuel emissions from district energy systems, a process that will require large capital investments, disruptive infrastructure improvements, and innovative technology.

PROCURE 100% FOSSIL FUEL-FREE ELECTRICITY

As a bridging strategy, by 2026 Harvard will contract for new renewable energy projects that prioritize reducing air pollution and carbon.

ELIMINATE ONSITE FOSSIL FUEL EMISSIONS FROM STAND-ALONE BUILDINGS

Buildings with fossil fuel infrastructure will need to be electrified and powered by zero-emissions electricity.

ELIMINATE FOSSIL FUEL EMISSIONS FROM UNIVERSITY VEHICLE FLEET

Harvard will electrify its owned and operated vehicle fleet and power these vehicles with zero-emissions electricity.

REDUCE ENERGY DEMAND IN BUILDINGS AND DISTRICT ENERGY SYSTEMS

Continue prioritizing opportunities for energy efficiency and reduced demand from district energy systems, purchased electricity, stand-alone buildings, and University vehicles.

BUILD SUSTAINABLY

Advance and strengthen Harvard's Sustainable Building Standards and ensure major new construction and renovations continue to follow them, establishing a high bar for climate, equity, health, and resiliency in the built environment and along the value chain.

REMOVE HARMFUL CHEMICALS FROM BUILDING MATERIALS

Continue removing harmful classes of chemicals from Harvard's value chain and incorporate new classes of chemicals of concern and product categories into its Sustainable Building Standards.

REDUCE EMBODIED CARBON IN CONSTRUCTION

Reduce embodied carbon in the primary materials used in new construction and major renovations at Harvard by a minimum of 20% by 2024, compared to conventional buildings. Harvard sees climate and health as inextricably linked and will balance embodied carbon reduction with health to advance innovation and holistic solutions throughout the value chain.

ADVANCE EQUITY AND DIVERSITY IN THE VALUE CHAIN

Advance equity and diversity in Harvard's value chain by tracking progress toward internal targets to increase the proportion of contracts with historically underutilized business enterprises (UBEs) in all building projects.

STRENGTHEN CAMPUS RESILIENCE

Conduct a University-wide climate vulnerability study to enable Harvard to take a campus-level approach to risk mitigation and future-proofing in support of a healthier community, in addition to the current practice of conducting and acting on project-level and area-level studies.

EXPAND AND ENHANCE CAMPUS GREEN AND OPEN SPACES

Continue to preserve and enhance campus open spaces and landscape elements, identifying opportunities to increase green space and the wellbeing and resiliency of the local community and environment. Expand the tree inventory on campus and continue to sustainably manage Harvard's robust urban tree canopy.

BUILD NET ZERO EMISSIONS BUILDINGS AND PROVIDE CAPITAL FOR ENERGY EFFICIENCY

Continue to update energy and emissions targets for new construction and renovation projects in Harvard's Sustainable Building Standards. New construction projects will be net zero emissions without new onsite fossil fuel infrastructure for heating and cooling. Invest in pilot projects and explore new financial models to drive innovation.

How
we
build

KEY

+ New Goal

⌚ Strengthened Goal

➔ In Progress

How
we
operate

RETHINK FOOD SYSTEMS

Reduce greenhouse gas emissions from food by 25% by 2030, enabling and supporting sustainable food systems, while continuing to implement Harvard's Sustainable and Healthful Food Standards.

ACCELERATE A ZERO-WASTE FUTURE

Measure and report data annually for Harvard's major waste streams and develop a strategic plan by the end of 2024 to achieve zero waste, including guidance and resources to help Schools and Business Units create their own zero-waste plans and goals.

REIMAGINE TRANSPORTATION SYSTEMS

Complete the transition of Harvard's shuttle-bus fleet to electric by 2035 and set new target dates for its remaining fleet vehicle types by the end of 2026, including an outline for installing more charging infrastructure for University vehicles and equipment. Maintain at least gold-level status in the League of American Bicyclists' Bicycle Friendly University Program. Support and enhance the pedestrian experience and sufficiently accommodate other personal transportation, such as Bluebikes, e-bikes, and scooters. Continuously improve sustainable transportation opportunities, programs, and incentives for Harvard affiliates.

INCREASE WATER EFFICIENCY AND MITIGATE WATER POLLUTION

Conduct a holistic water impact assessment to help prioritize which additional strategic investments should be made to further reduce potable water use and reduce water pollution on campus and along the value chain.

IMPROVE BUILDING ENERGY EFFICIENCY

Continue to prioritize the identification and strategic implementation of energy-efficiency and demand-management opportunities in Harvard's existing buildings.

ADVANCE SUSTAINABILITY THROUGH BUILDING OPERATIONS

Advance sustainability through effective and innovative management of the built environment, in collaboration with buildings and facilities managers.

DEVELOP A HOLISTIC APPROACH TO SOURCING

Develop a strategy to integrate climate-related factors—such as value-chain emissions—equity, health, and waste minimization into purchasing decisions, vendor selection, and vendor management.

HARVARD'S VALUE-CHAIN EMISSIONS (SCOPE 3)

Reduce value-chain emissions and set meaningful goals and targets, especially in key areas such as capital goods, business travel and commuting, food, and other purchased goods and services.

THE SALATA INSTITUTE FOR CLIMATE AND SUSTAINABILITY

Develop and promote durable, effective, and equitable solutions to the climate change challenges confronting humanity through collaboration across Harvard's many areas of expertise.

PRESIDENTIAL COMMITTEE ON SUSTAINABILITY

Continue to advise on strategy and on how Harvard's sustainability leadership and convening power can be leveraged and scaled to have the greatest impact beyond our campus.

HARVARD LIVING LAB: SUSTAINABILITY ACCELERATOR

Work to unlock the campus's potential as a test bed and living lab, incubating transformative new ideas and piloting them on Harvard's campus and with partners.

STUDENT SUSTAINABILITY LEADERSHIP

Provide feedback and recommendations on Harvard's overall sustainability strategy, and collaboratively implement projects to advance Harvard's sustainability vision and goals.

HARVARD INNOVATION LABS (I-LAB)

Triple the number of climate ventures it supports and deepen its resources for climate entrepreneurs.

EXTERNAL PARTNERSHIPS

Continue to lead and engage with local, regional, national, and international partners to amplify and scale solutions, learn from others, and collectively share knowledge.

Engaging the Harvard community to move forward

Bringing this Sustainability Action Plan to life will take a united effort across a decentralized University, as it requires shared responsibility for action. Harvard will forge new partnerships and strengthen existing ones. We will continue to collaborate with local Cambridge and Boston communities, other education institutions and nonprofit organizations, as well as companies in different industries.

The role of the Presidential Committee on Sustainability (PCS), the Office for Sustainability (OFS), and Harvard Central Administration (CADM)

The Presidential Committee on Sustainability, the Office for Sustainability, and Central Administration are the three bodies responsible for recommending University-wide priorities, goals, standards, policies, and guidelines, and creating a shared implementation agenda in partnership with the rest of the Harvard community.

The Office for Sustainability with the Office of the Executive Vice President, and in partnership with other Central Administration departments, coordinates action among Schools, Institutes, and relevant Business Units (such as Real Estate and University Housing) to advance and implement these University-wide initiatives and achieve our collective goals. Business Units within Central Administration also strive to be hubs for innovation implementing the vision laid out in this plan. In addition, they collaboratively develop new key performance indicators and metrics to track impacts on climate and the environment, health, and equity.

The Office for Sustainability serves as a central resource center that facilitates vision and strategy development, advances priorities, convenes and educates, and tracks and reports on progress.

The role of Harvard's Schools, Institutes, and Business Units

Harvard's Schools, Institutes (such as Harvard's Radcliffe Institute), and relevant Business Units (including Real Estate and University Housing) are responsible for setting their own sustainability plans, in coordination with the Office for Sustainability. Each will draw on the priorities outlined in this Sustainability Action Plan, selecting key pillars and priorities based on its respective strengths and opportunities. Schools, Institutes, and Business Units will integrate climate, equity, and health into decision-making at all levels, create governance structures to ensure action and accountability, and ensure that their teams and vendors are following

Harvard's sustainability standards for buildings projects and capital goods, food, cleaning, site and landscaping maintenance, information technology, and purchasing. Each School, Institute, and Business Unit will also be responsible for tracking and reporting its progress to the Presidential Committee on Sustainability and the Office for Sustainability.

The role of students

Students are the heartbeat of Harvard and play a critical role in advancing sustainability at the University. Harvard encourages students to learn about sustainability and climate change through curricular, co-curricular, and extracurricular programs, and find new ways to incorporate this knowledge into their studies, research, and actions. Students can also work with the Office for Sustainability to propose projects, apply for grant funding, and partner with faculty and staff to pilot, prove, and scale solutions. Finally, through the Council of Student Sustainability Leaders (CSSL) and other groups, students can participate in implementation efforts, innovative pilot projects, and initiatives on campus and beyond.

A role for everyone

While accelerating action in support of sustainability requires systemic change, individuals have a vital role to play in advancing change, improving systems, and piloting innovation. Harvard encourages all members of our community to find new opportunities to advance their own understanding and knowledge of the interconnections between climate and the environment, equity, and health. Community members can leverage their personal strengths, networks, and roles to support, influence, or take a leadership role in this endeavor. No matter a person's affiliation with Harvard, everyone has a role to play.

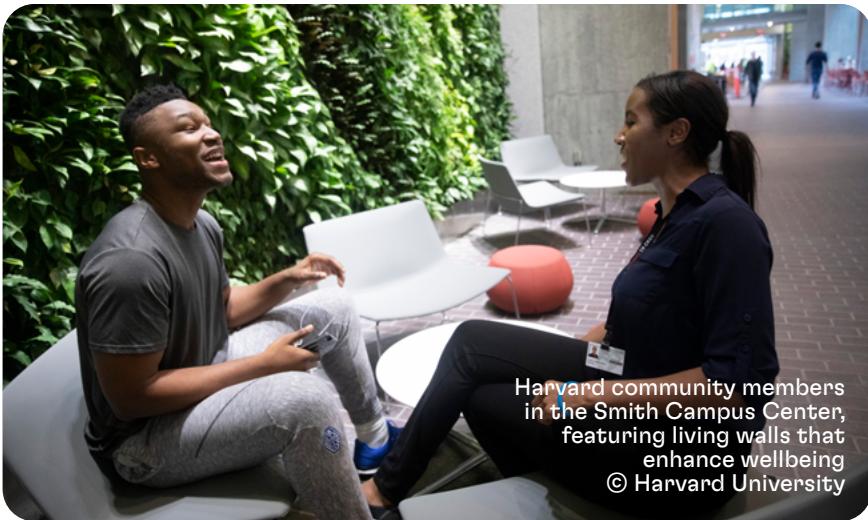
A call for collaboration

The complex challenges we all face require the Harvard spirit of *veritas* (truth): collaborative thinking and action, open minds, humility, and a fierce desire to learn, listen, and act in support of sustainability. Harvard commits to thinking and operating in this collaborative and inclusive way within its own community and with partners, and calls for others to do the same.



Governance and accountability

How Harvard will deliver on this Plan



Harvard community members in the Smith Campus Center, featuring living walls that enhance wellbeing
© Harvard University

Achieving success with the Sustainability Action Plan requires extensive collaboration between many disciplines and offices in the Harvard University structure.

Harvard's sustainability vision, strategy, and goals are overseen by the [Presidential Committee on Sustainability](#) (PCS), which ensures that all sustainability actions are informed by the latest research and thinking and aligned with the University's mission. Led by two faculty members and the Executive Vice President, and managed by the Office for Sustainability, the PCS comprises faculty, students, and operational leaders from across campus.

The [Office for Sustainability](#) (OFS) convenes and leads committees and working groups that represent hundreds of stakeholders from across the University. These teams meet regularly to brainstorm strategies and goals to drive innovation and continuous long-term improvement.

OFS is responsible for developing and leading the University-wide implementation strategy and reporting for the Harvard Sustainability Action Plan. OFS partners with Central Administration units—including Environmental Health and Safety, Energy and Facilities, Transportation, Strategic Procurement, and others—to work in collaboration with Harvard's Schools, Institutes, and Business Units in support of this work. Specific targets, policies, and reporting requirements will be established and updated within Harvard's University-wide sustainability standards.

Operations, facilities, and administrative leaders from Harvard's Schools, Institutes, and Business Units meet

regularly as part of the [Sustainability Management Council](#) (SMC) to share best practices, to review and analyze new policies and roadmaps, and to ensure the achievement of the University's common goals.

The input of students is also key to sustainability initiatives. The [Council of Student Sustainability Leaders](#) (CSSL), led by the Office for Sustainability, provides an opportunity for Harvard graduate and undergraduate students to contribute, advise, and advance Harvard's climate, equity, and health plans and progress, and to co-create new learning and solutions.

In September 2021, Harvard appointed its inaugural [Vice Provost for Climate and Sustainability](#). The role involves working closely with faculty, students, staff, and academic leadership from across the University to guide and further develop Harvard's strategies for advancing climate and sustainability research and teaching at the University. The Office of the Vice Provost for Climate and Sustainability also provides guidance and support for achieving Harvard's sustainability goals in partnership with the Presidential Committee on Sustainability and the Office for Sustainability.

This Sustainability Action Plan should be viewed as a living document. It will evolve over time, supported by a continuous improvement process of reviewing and updating goals and objectives to strengthen Harvard's strategy. We will also continue to establish baselines and clear, measurable targets for our priority areas of focus. OFS will release an annual update on Sustainability Action Plan progress through the online [Sustainability Report webpage](#) to ensure accountability and transparency.



Harvard community members studying in the Smith Campus Center
© Harvard University

Harvard's progress and accomplishments

Harvard is proud of the progress it has made since launching its first Sustainability Plan in 2014. Some of our key achievements include:

Reducing emissions as we grow

Harvard has ambitious fossil fuel goals. The University successfully achieved its initial emissions goal set in 2008, which reduced Harvard's Scope 1 and 2 greenhouse gas emissions by 30% by 2016, from a 2006 baseline, even as the campus grew. In 2018, Harvard set bold new goals to be fossil fuel-free by 2050 and fossil fuel-neutral by 2026. These science-based goals are driving Harvard to reimagine its energy consumption. We will continue to pursue energy efficiency while transitioning away from the fossil fuels that have been used to heat, cool, and power our buildings.

Building a fleet for the future

Harvard has made significant progress in accelerating sustainable transportation across campus. The University introduced four fully electric shuttle-buses, replacing around 30% of Harvard's shuttle-bus fleet. These lower annual greenhouse gas emissions by more than 220,000 pounds, while reducing other harmful air pollutants and benefiting the health of local communities in Cambridge and Boston.



Open-source sustainability guidelines available to the public

In collaboration with Harvard Strategic Procurement, the Office for Sustainability developed a [Sustainable Purchasing Guide](#) to help procurement teams and individual purchasers make informed and sustainable purchasing decisions.

Developed by a team of students and staff from the Harvard T.H. Chan School of Public Health and Harvard Office for Sustainability, [Harvard's Sustainable Meeting and Event Guide](#) cultivates a culture of health in how we plan and design campus meetings and events, providing opportunities for employees and students to eat well and stay active, while reducing their environmental impact.

Scalable sustainability standards

Harvard has developed rigorous, science-based sustainability standards based on cutting-edge Harvard University research in areas such as buildings and food. These leading standards can be scaled and adopted by other institutions and organizations.

- [Harvard's Sustainable Building Standards](#) have established the University as an internationally recognized leader in sustainable, high-performance buildings. Developed to align with the University-wide Sustainability Plan, these requirements are key to achieving Harvard's climate goals.
- In 2017, the Office for Sustainability launched a partnership with the Harvard T.H. Chan School of Public Health and the Harvard John A. Paulson School of Engineering and Applied Sciences, to create the [Harvard Healthier Building Academy](#). The goal was to ground the Schools' purchasing decisions in the latest science, including leading research undertaken at Harvard that proved how decisions about healthier materials lead to lower levels of toxic chemical classes in buildings.
- Launched in April 2019, [Harvard's Sustainable and Healthful Food Standards](#) were developed by a multidisciplinary faculty committee with input from the Office for Sustainability, the Council of Student Sustainability Leaders, and experts in the field. The Standards are designed to increase access measurably for students, faculty, staff, and visitors to sustainable and healthful food offerings. Harvard was also a founding member, and the first university to sign the Coolfood Pledge and its collective goal to reduce food-related greenhouse gas emissions by 25% by 2030.
- Harvard has also developed [Sustainable Site Maintenance Standards](#), [Sustainable IT Standards](#), and [Sustainable Cleaning Standards](#).

APPENDIX

Intersectional lens: Questions that guide Harvard's drive to advance climate, equity, and health

At Harvard, we seek to act in ways that address climate, equity, and health holistically and comprehensively. Rather than addressing these areas as separate issues, we are challenging ourselves to incorporate them into every action we take—how we design the work we do, how we choose priorities, and how we measure our success. The following questions guide our thinking and decision-making and help us stay accountable in our drive to have a positive impact. They are not exhaustive but rather the beginning of a conversation.

These questions were developed by Harvard's Office for Sustainability in partnership with the Office for Equity, Diversity, Inclusion, and Belonging.

CLIMATE & ENVIRONMENT

Have we avoided or minimized the use of fossil fuels and embodied carbon?

Have we minimized the pollution of air and water?

Have we minimized waste?

Have we maximized the efficient use of resources like energy, water, and materials?

Have we considered the impact on biodiversity?

Have we considered ways to advance a just transition to more sustainable systems?

Have we considered the full life cycle of our choices—including production, transportation, use phase, disposal, and end-of-life?

EQUITY

Have we considered the impact on people who are especially vulnerable to environmental impacts—for example, low income and historically marginalized communities facing disproportionate levels of pollution?

Are we aiming to minimize harm and maximize the benefits to those most vulnerable to environmental impacts?

Have we made it inclusive, accessible, available, and beneficial for all communities?

Are we partnering with suppliers and contractors committed to fair labor practices, diversity, equity, and inclusion?

Are we addressing historical disparities and cultural differences?

Was universal design incorporated to ensure solutions are barrier-free for all?

Did we provide meaningful opportunities for affected vulnerable communities to contribute to the decision-making process?

In decision-making, did we consider more than just cost? Were shared values and cultural differences considered?

HEALTH

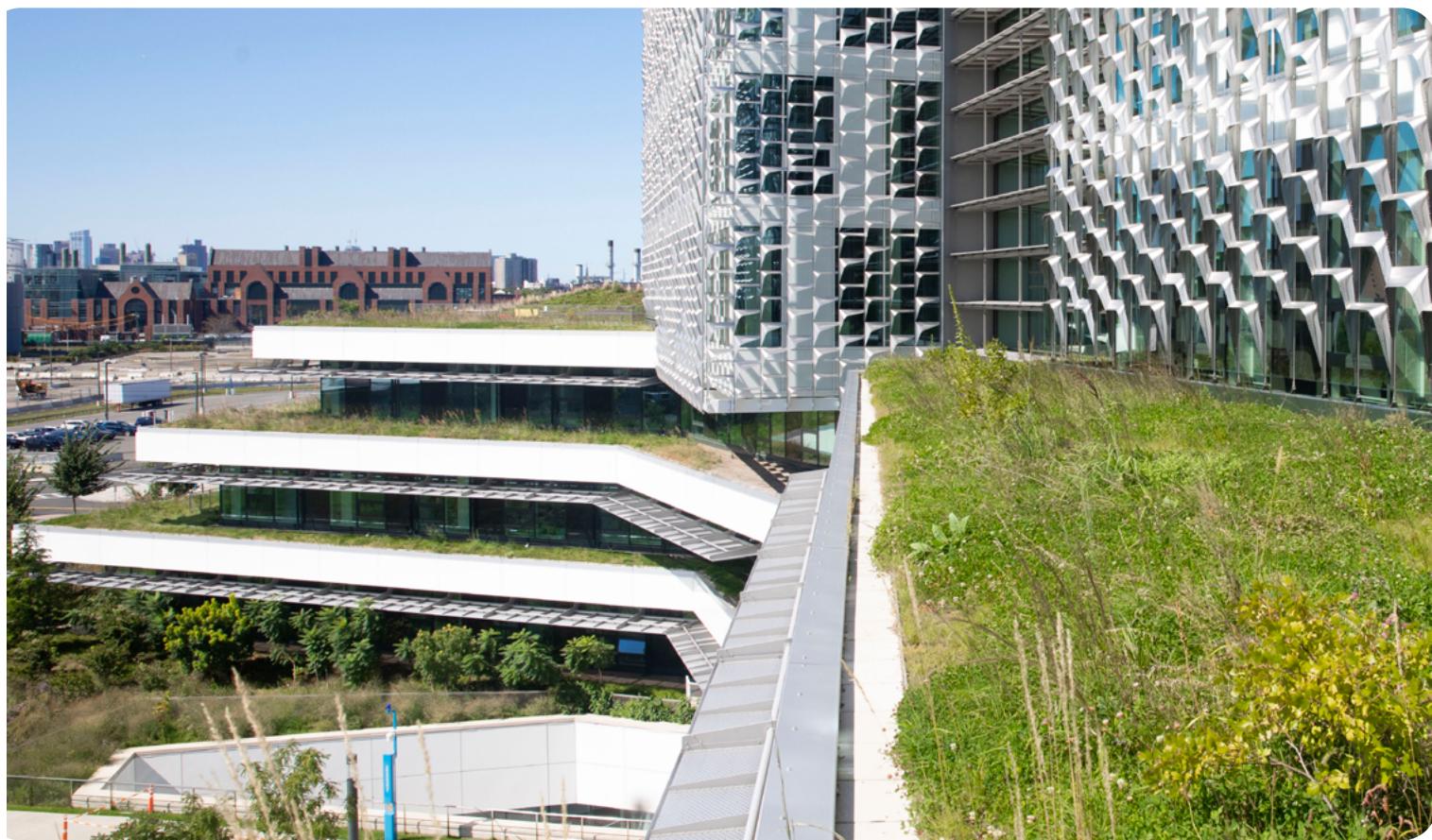
Have we considered the health impacts of our choices and decisions along the value chain, especially on vulnerable communities?

Have we considered indoor air quality and worked to avoid toxic chemical classes of concern?

ACCOUNTABILITY

Are there accountability structures in place to ensure success?

Do we have a plan to enable measurement of services provided and impacts, including harms and benefits?



Harvard Office for Sustainability

Cambridge, MA 02138

sustainable.harvard.edu