

STATE OF SUSTAINABILITY 2022



**PERKINS —
EASTMAN**

Perkins Eastman Executive Committee Introduction

Perkins Eastman's inaugural State of Sustainability report presents a snapshot of our progress to date. This first report provides a road map for delivering transformative sustainable design across all of our work and in every practice area, with no exceptions and no excuses.

Climate change is the greatest global challenge of our time. It underlines all other crises: public health, social justice, and economic. As such, there is no singular solution. We all share responsibility for our role. Accumulative local actions on a worldwide scale are essential if we are to minimize the impacts of climate change. As designers, architects, planners, and representatives of a global firm, we all have a part to play, an opportunity to seize the challenge, and an obligation to work together.

Our studios are richly populated with individuals whose diverse talents and creative energy contribute to great design and world-changing work. It is the responsibility of leaders at all levels within the firm to cultivate and direct this talent and energy into the thinking and actions that address the global climate challenge. To support this, we have an excellent sustainability team fostering a network of sustainability advocates across the firm. We continue to invest in numerous tools, training, and research to support our creative search for design solutions. We have the infrastructure in place and we are fortunate to have such a dedicated and passionate team of people united in this era-defining cause.

It won't be easy, and it won't happen overnight. It happens step-by-step—as is evident in the case studies, facts, and figures presented in this report—but now is the time to shift gears and leap ahead. Sustainability is intrinsic to all design, it isn't an afterthought and there are no shortcuts. Gimmicks and trends are not sustainable. Novelty is not innovation, and digital technology isn't the all-encompassing answer. True sustainability requires the thoughtful assessment of every design decision throughout the process. This is the only way to arrive at a balanced solution appropriate to each design challenge and budget.

We have an exciting opportunity to rebalance, renew, and revive a positive symbiotic relationship between people, planet, and the environment. This is our chance to design and build a better future, to be “good ancestors” for generations to come. If we are to live up to our ethos of *Human by Design*, we must deliver meaningful, impactful, and sustainable design in every aspect of our work.



Why We Need to Change

The Urgency of Climate Change

The 2022 United Nations Intergovernmental Panel on Climate Change (IPCC) report paints a grim future for the planet. Current policies and legislation will only limit global average temperature rise to 3°C, which is twice the temperature increase that is recommended (1.5°C) to mitigate the severe effects of climate change on people, wildlife, and ecosystems. The few scenarios that keep us under 1.5°C warming increase require global CO₂ and greenhouse gas (GHG) emissions to peak between the years 2020 and 2025—meaning NOW. The Glasgow Climate Pact, which was adopted at the UN Climate Change Conference (COP26) in 2021, begins to address this by calling all nations to accelerate climate action plans. But government policy shifts alone cannot halt temperature rise. The AEC industry must also accelerate its efforts.

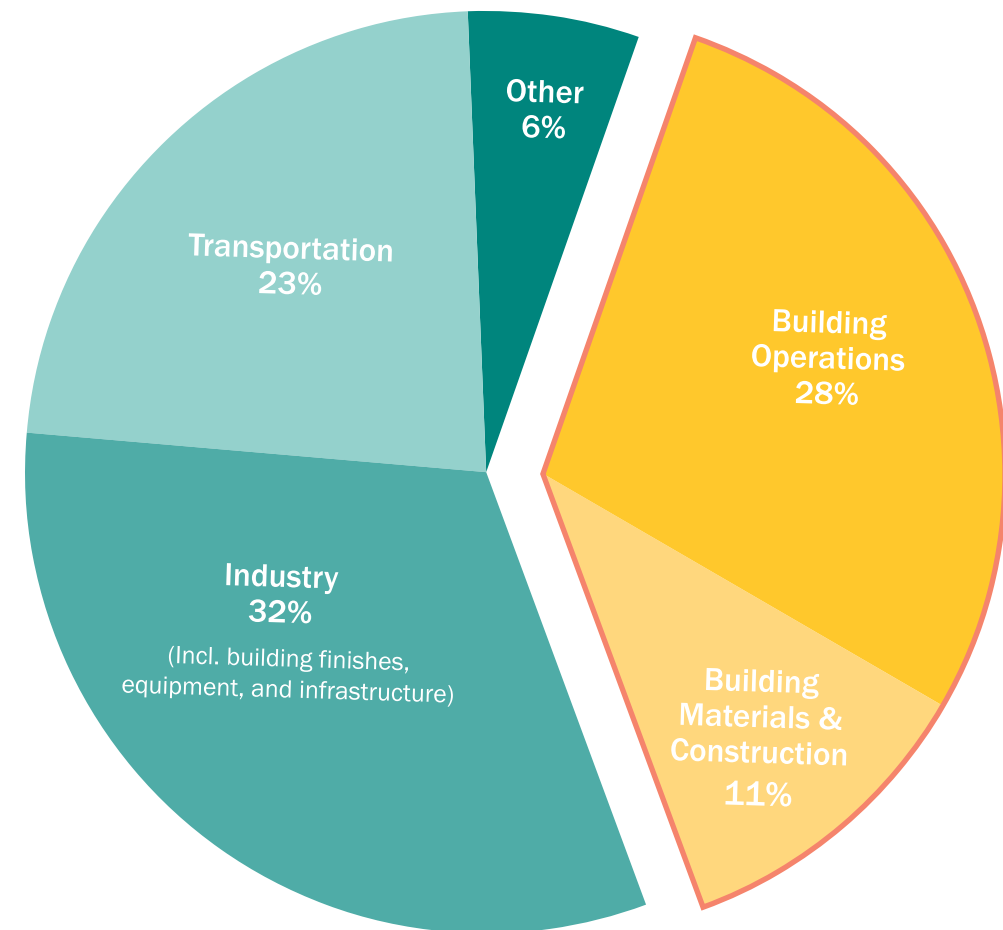
Building Industry Response

The building industry comprises more than a third of global CO₂ emissions; its significant contribution cannot be ignored. Over the past year we've seen an increase in Net Zero Energy initiatives across the globe, whether in legislation or individual project pursuits, and a similar discussion is growing around reducing or eliminating fossil fuel use bringing carbon into the conversation. If we have learned anything from the IPCC report,

it's that we don't have time to wait for new policies or legislation to be enacted; it is up to us to be proactive. On the bright side, we now have many precedents to build on, including Net Zero Energy buildings in a range of climates and building types, that also meet social and economic sustainability goals.

Social Sustainability

The exponential impact that climate change has on crises in the areas of public health, economics, social justice, and environmental sustainability has been at the center of industry discourse for quite some time. Today, there is a principle understanding that to mitigate these linked crises, the effects of climate change must also be a core consideration. For example, the social-justice crisis has underscored the importance of looking at sustainability from a holistic vantage point and addressing the inequities still present in our industry. However, conversations around diversity, equity and inclusion, and topics like climate justice remain in the definition stage, but we expect to see significant improvements in metrics, targets, and commitments at a firm and industry level.



39% of Global CO₂ Emissions Come From The AEC Industry

source: 2018 Global ABC Report



JOHN LEWIS ELEMENTARY SCHOOL, WASHINGTON, DC | TARGETING TO BECOME THE FIRST SCHOOL IN THE WORLD TO BE NET ZERO ENERGY, LEED, AND WELL CERTIFIED

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01

Sustainability Resolution

On Earth Day 2022, we took a stand for our people and our planet by launching the Perkins Eastman Sustainability Resolution, which is presented on the following pages. This resolution is a guiding light, orienting and uniting ourselves and our work toward a shared vision of the future in which our work operates in balance with nature, not at its expense. In this resolution we are standing up for what we believe in, declaring our commitments, setting clear goals, and holding ourselves accountable. While we are proud of the progress we've made over the years, we acknowledge that we have a long way to go.

We hope this resolution reinforces our firmwide passion and commitment to *Human by Design*, which is rooted in sustainability. We also hope that its sincerity and transparency will help others in their pursuit of a sustainable future.



ELIOT ON 4TH, WASHINGTON, DC | LEED GOLD

OUR BELIEFS

*We design for people. We design to enhance the human experience and leave a lasting and positive impact on people's lives and the world we inhabit. Design starts and ends with the human being; if everything is design, everything we do is **HUMAN BY DESIGN**.*

We design for a sustainable and resilient future. The bond between humans and nature is unbreakable, and we have an inherent responsibility to enhance the health and well-being of our people, our communities, and our planet. Embracing the patterns of nature, we strive to uncover the possibilities of design.

— from the Perkins Eastman Manifesto

At present, our relationship with nature is out of balance and one-sided. We take from the earth and rarely repay these withdrawals. But what if, instead of seeing the earth merely as a resource to be exploited, we were to view it as a symbiotic partner that needs us as much as we need it? A balanced partnership in which we give back just as much as we take?

We believe we can achieve this balance, but to do so, our vision must become the guiding light at the core of our design practice. This means design and

sustainability can no longer be viewed separately: they are one and the same.

We believe good design is sustainable design.

NOW is the time to act, to hold ourselves, our colleagues, and our communities accountable. There is still time to achieve this vision of balance, but we must act IMMEDIATELY. We must prioritize sustainability in everything we do.

OUR COMMITMENTS

We can no longer tolerate “greenwashing”—the practice of providing misinformation around environmental value—in any form, neither in our industry nor in the product and manufacturing industry, whether it's intentional or not. Moving forward, we commit to putting an end to this behavior.

We don't greenwash. PERIOD.

TO OUR CLIENTS

We commit to providing the best guidance to maximize value across the triple bottom line: social, economic, and environmental. We'll challenge and inspire you in the best of ways. We commit to partnering with you in this endeavor, and bringing value to every conversation and interaction.

TO OUR COLLABORATORS

We commit to truly working with our consultants and our contractors—now more than ever. We all need to unite in pursuit of our shared vision for a balanced, healthy planet.

TO OUR FELLOW EMPLOYEES

We commit to providing you the training, resources, and experiences you need to let your passion for sustainability develop, grow, and flourish.

TO OUR COMMUNITIES

We commit to starting every project without preconceived notions. We won't come to the table with a preset design or aesthetic; we begin by listening to everyone, and we respond to context, existing conditions, and data to inform our design approach.

TO EVERYONE

We commit to tracking our progress so our actions have a measurable, positive impact. We won't give up, and we won't let ourselves become complacent. We commit to doing everything we can within our power; where that fails, we commit to advocating for change.

OUR GOALS

Speaking to our **HUMAN BY DESIGN** ethos, each of our following goals centers around people. And because we believe sustainability encompasses everything, our goals reflect our company's social, economic, and environmental priorities.



CARBON

We strive to be a carbon-neutral firm—in both our operations as well as in our work with our clients.



RESEARCH

We strive to be curious—to use applied research to enhance and advance our work.



HOLISTIC WELLNESS

We strive to think about wellness holistically—in terms of people and the planet, and at all scales of work.



MATERIALS

We strive for all the materials we use to have a net-positive benefit on human health, climate health, ecosystem health, social health and equity, and to contribute to a circular economy.



DIVERSITY, EQUITY & INCLUSION

We strive to correct the inequities in our practice, our projects, and our communities, and to celebrate diversity and culture, which we believe enriches our design and our lives.



RESILIENCE

We strive to lead with passive design, as this design strategy provides the key to reducing future climate emissions and improving livability and resiliency as the impacts of climate change take hold.

02

Sustainability Network

Over the past twenty years, we have built an internal sustainability network that has become a rigorous and interconnected group of passionate people at all levels across the firm. It is through their dedication that we now have the foundation and the resources to transform how we approach our work.

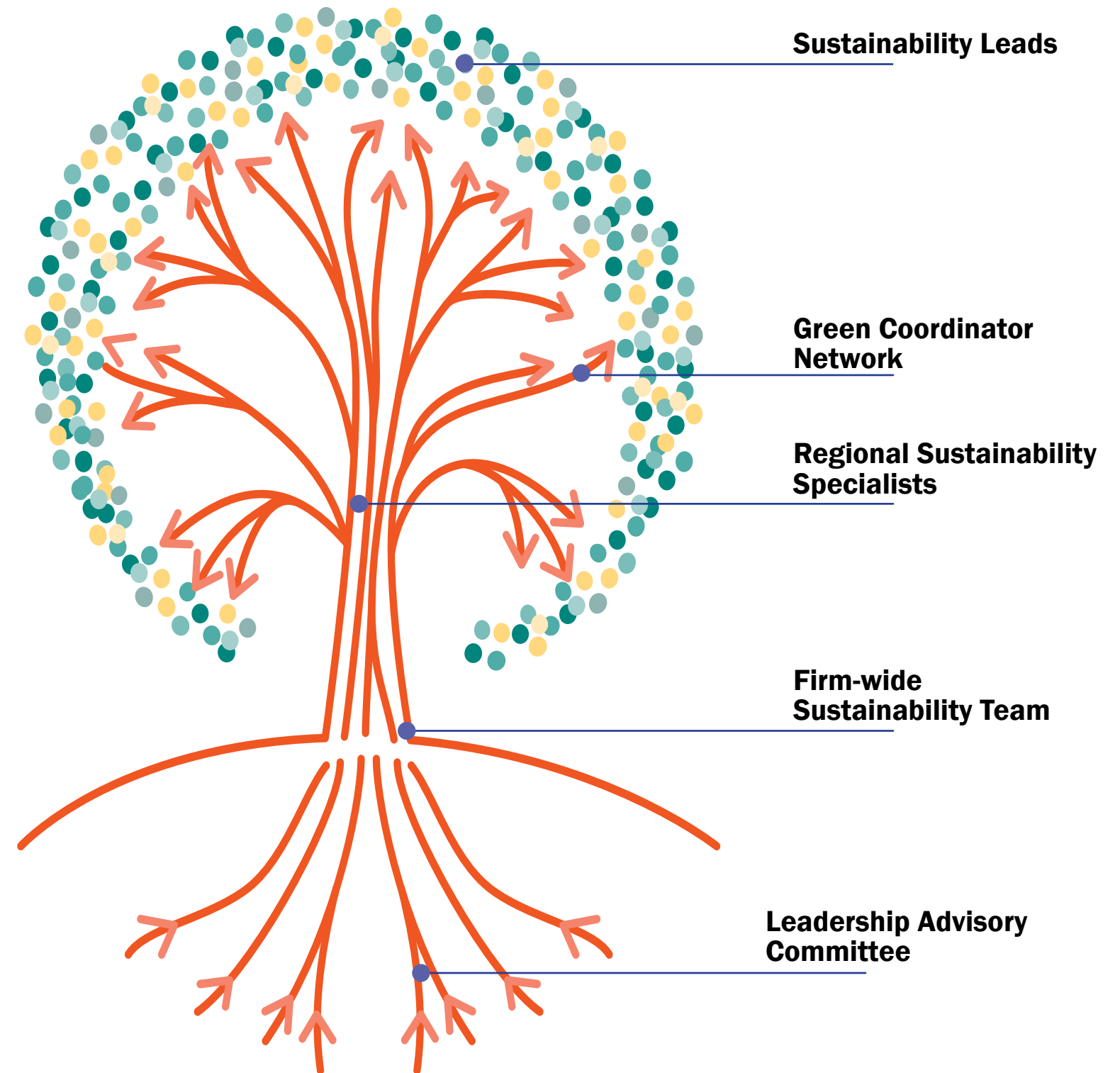
At its base, the firm-wide sustainability team oversees initiatives across all Perkins Eastman offices and studios. The team coordinates the firm's global strategy to support the sustainability of our work, our operations, and our culture. This firm-wide group is supported by an advisory committee of Perkins Eastman leaders who provide input and guidance on the direction of sustainability initiatives.

The newest branch of the network are our embedded regional sustainability specialists, who provide local support to our regions.

Our Green Coordinator Network is composed of two representatives from each studio who serve as liaisons between the firm-wide sustainability team and our regions, feeding information both ways to inform the firm-wide approach and connect with it on a local level.

These green coordinators are key to defining our annual strategies around sustainability and implementation, as they participate in our nine subcommittees working to make progress around our annual goals.

The final and broadest layer is our network of sustainability leads. These are dedicated team members across the firm who facilitate the sustainability conversations on every project, helping us ensure that sustainability is embedded in our design process and culture.



Sustainability Subcommittees

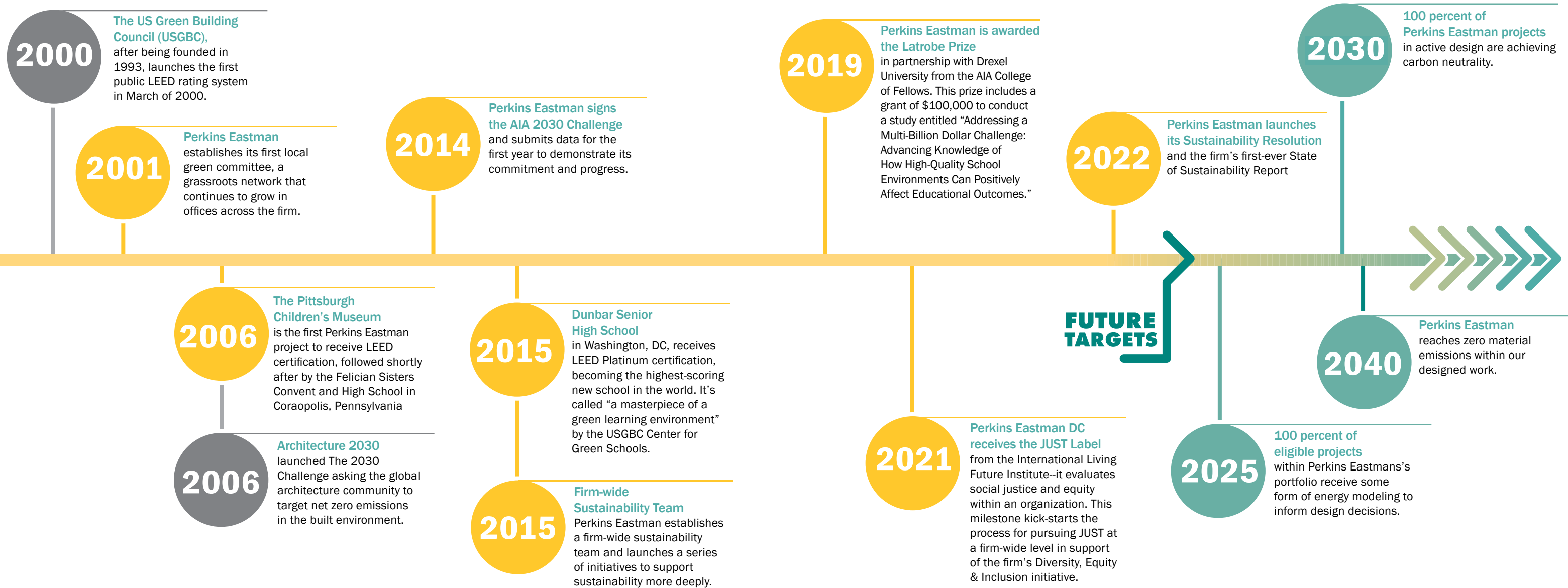
We currently have nine active subcommittees working to make progress toward our annual goals. Below are the goals for each subcommittee this year.

Energy and Carbon To increase firm-wide awareness of energy and carbon and to provide the support necessary to increase energy modeling.	Knowledge Management To craft and coordinate contents of monthly education modules and foster knowledge exchange strategies across offices.	Project Performance — PA Metrics To establish two to three measurable design strategies that best align with practice-area priorities and showcase exemplary projects at a firm-wide level.
Project Performance — Material Health To create meaningful material-health strategies across Perkins Eastman, increase knowledge, and engage staff on material-health topics, and to select the best, most sustainable products for our designs.	Research and Advocacy To communicate our internal sustainability research and passion externally, sharing our thought leadership on key topics and advocating where and when necessary to advance the industry.	Process — Data Analytics and Tools To inform design by assessing and testing available tools we have in-house and tools that are available in the market.
Communication To deepen firm-wide understanding of sustainability and increase external visibility of the firm’s sustainability expertise and commitment.	Process — Design Brief To rollout the design brief tool to be used by all project Perkins Eastman team members.	Corporate Sustainability To develop an annual State of Sustainability Report that demonstrates our efforts and progress.



BENJAMIN BANNEKER ACADEMIC HIGH SCHOOL, WASHINGTON, DC | FIRST HIGH SCHOOL IN THE DISTRICT TARGETING NET ZERO ENERGY

PERKINS EASTMAN SUSTAINABILITY JOURNEY



Color Key:

- Perkins Eastman milestones
- Industry milestones
- Future milestones



OUR WORK

SPRING LAKE VILLAGE, SANTA ROSA, CA | LEED GOLD

04

Good Design Is Sustainable Design

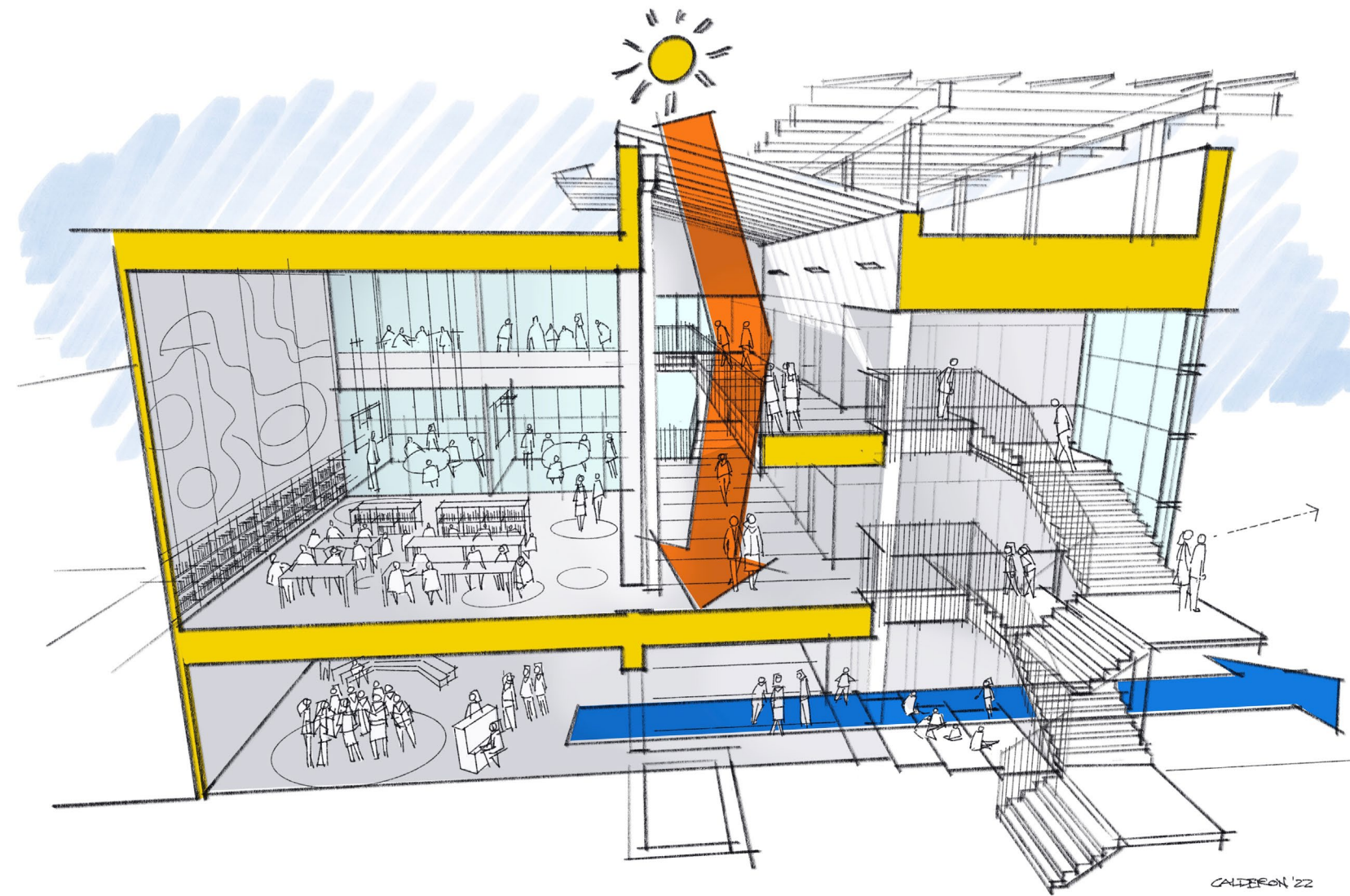
We believe the only way to truly achieve our goals for the future is to make sure sustainability is rooted within our design culture and process. It can no longer be an aside or an add-on service. Here are a few specific highlights from our progress this year.

Perkins Eastman Annual Excellence Awards

In congruence with the AIA's Framework for Design Excellence, which uses the Committee on the Environment's (COTE) Top Ten measures for successful projects, Perkins Eastman launched its own internal awards based on the same framework. An external jury of industry experts judged the projects submitted across all of our studios and selected three top projects that showcase design excellence in its truest sense—with performance and sustainability considerations deeply embedded within.

Perkins Eastman High Performers

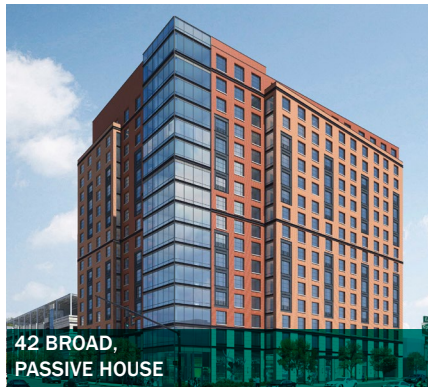
This past year was a big year for us, with many projects setting and reaching ambitious sustainability goals, becoming the first of their kind. In the fall of 2021, we opened the first two schools in the District of Columbia to target Net Zero Energy (NZE). Joining these schools are many projects across the company pursuing NZE, LEED Platinum, WELL certification, Fitwel certification, and Passive House. Although achieving a third-party market certification itself is not the ultimate goal, these projects are using sustainability market standards to showcase their success in reaching their high-performance goals around energy, wellness, and sustainability.



BARD HIGH SCHOOL, WASHINGTON, DC | THE PROCESS OF TRANSFORMING AN EXISTING BUILDING INTO A NET ZERO ENERGY, LEED PLATINUM, HIGH-PERFORMANCE LEARNING ENVIRONMENT



2LIFE NEWTON,
TARGETING WELL



42 BROAD,
PASSIVE HOUSE



ASHOKA UNIVERSITY,
TARGETING NET ZERO + LEED PLATINUM



LA MORA SENIOR LIVING,
TARGETING PASSIVE HOUSE



MARTIN LUTHER KING JUNIOR SCHOOL,
LEED PLATINUM



MINNIE HOWARD HIGH SCHOOL,
TARGETING NET ZERO + LEED GOLD



BANNEKER HIGH SCHOOL,
TARGETING NET ZERO + LEED PLATINUM

PERKINS EASTMAN HIGH-PERFORMING PROJECTS



BARD HIGH SCHOOL,
TARGETING NET ZERO + LEED PLATINUM



NYU LANGONE HEALTH ASC,
PURSUING LEED & FITWEL CERTIFICATION



OCC RECYCLING CENTER,
NET ZERO + LEED GOLD



PERKINS EASTMAN CHICAGO OFFICE,
WELL PLATINUM



BRECHIN BCCUCC DEVELOPMENT,
TARGETING PASSIVE HOUSE



DUNBAR SENIOR HIGH SCHOOL,
LEED PLATINUM



EAST END COOPERATIVE MINISTRY,
LEED PLATINUM



PECONIC LANDING, LEED PLATINUM

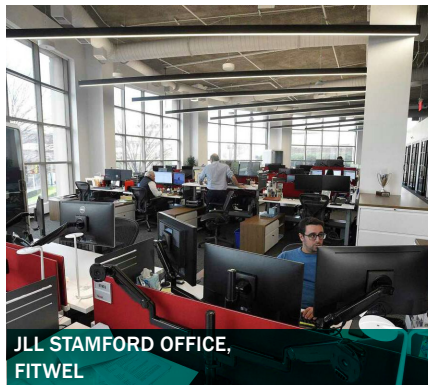
203 CERTIFIED PROJECTS



SCHOOL WITHOUT WALLS,
TARGETING NET ZERO + WELL + LEED GOLD



FRANCISCAN SISTERS ST. JOSEPH,
LEED PLATINUM



JLL STAMFORD OFFICE,
FITWEL



JOHN LEWIS ELEMENTARY, TARGETING
NET ZERO, WELL, + LEED PLATINUM



TOBIN/VASSAL LANE,
TARGETING NET ZERO + LEED PLATINUM



TUTT LIBRARY AT COLORADO COLLEGE,
NET ZERO



WOODSIDE OF WASHINGTON,
TARGETING WELL

05

Energy and Carbon

To address the role we play in climate change, we carefully focus on improving the energy efficiency and, more broadly, reducing the carbon associated with the construction and operation of our work. We strive to be a carbon-neutral firm, and although we have a long way to go, below are the steps we are taking to get there.

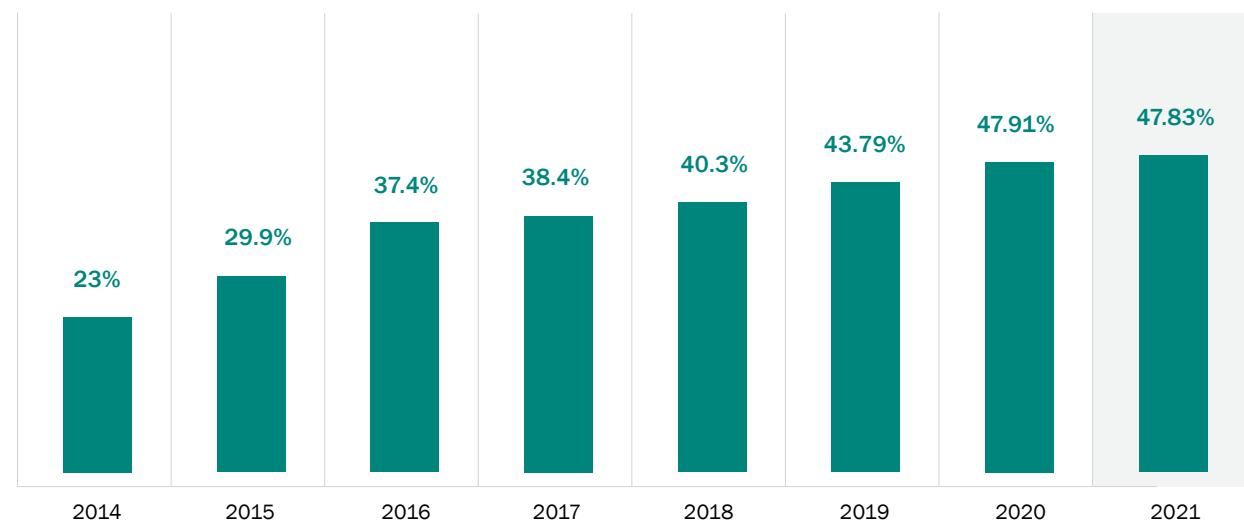
Where We Are

Perkins Eastman has been a signatory of the AIA 2030 Commitment since 2014. While we have faced challenges collecting all of the data from the portfolio of our 1,100-plus person firm, we've also made significant progress. This year, we were able to successfully submit 96 percent of our eligible projects, with only four percent being unable to submit for lack of data or other challenges like verification of international codes.

AIA 2030 Challenge

2021 Submission

Average Percentage Predicted Energy Usage Intensity (pEUI) Reduction




AIA 2030 Challenge Submission Highlights From This Year:

We submitted
267
projects in 2021

47.83%
Predicted Energy Use Intensity
(pEUI) reduction

ALL 10
of our top-performing projects
were designed with
energy modeling software.

 **3**
of these projects are
targeting Net Zero Energy.

This equates to saving
**369,294 Metric
Tons of CO₂**
 or taking
80,281
passenger vehicles
off the road every year.

21.7%
2020
39.5%
2021
We nearly doubled the
number of projects that
used energy models from
2020 to 2021.

Getting to 100 percent

We are now only eight years away from 2030, the year that our organization and many others have committed to achieving the 2030 Challenge target of designing 100 percent carbon-neutral buildings. Although we are doing well at tracking and reporting our energy performance every year, we have a long way to go to meet the 2030 Challenge, and we’ve come up with a plan to get us there.

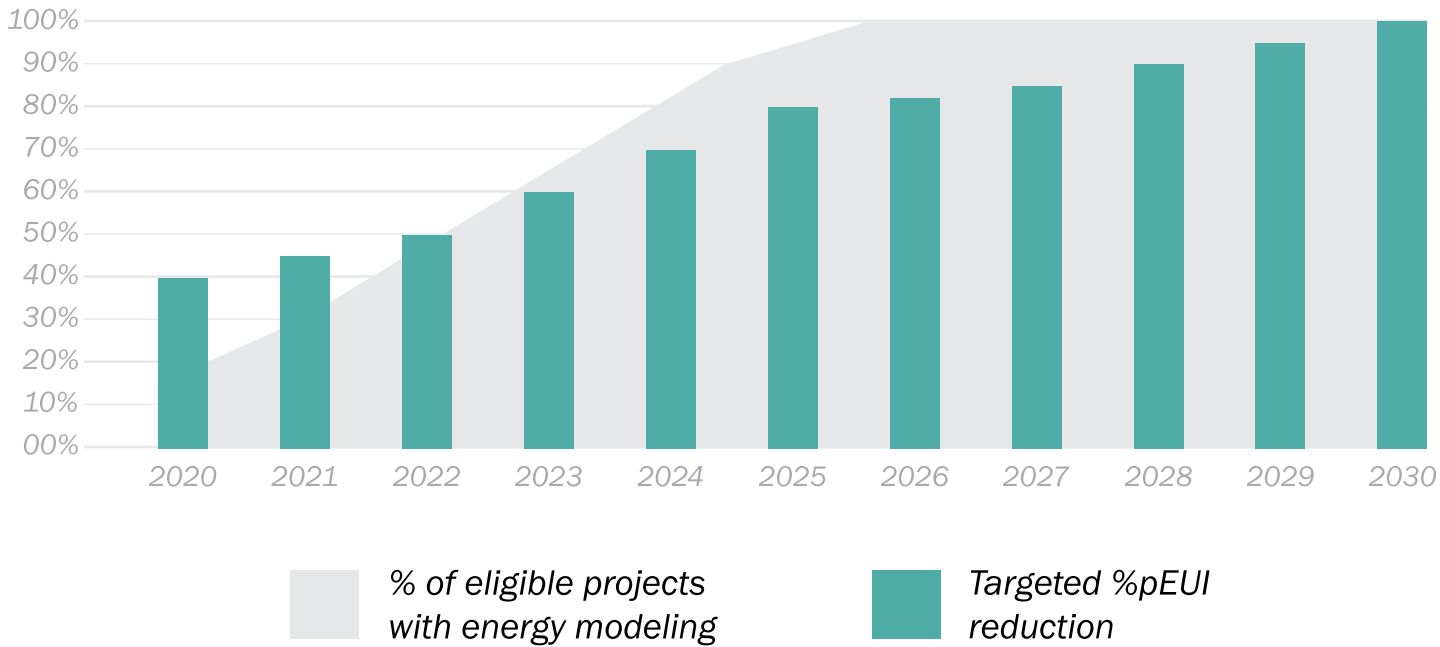
At the core of our plan—and critical to its success—is increasing the amount of energy modeling across our portfolio—either in- or out-of-house. Currently for our 2021 design work, 39.5% of our reported projects have an energy model compared to 21.7 percent in 2020. By the year 2025, we need that number to be 100%. Codes can only take us so far. To achieve higher levels of energy performance, we need to begin leveraging energy modeling as a design tool. Design-phase energy modeling is strongly linked with improving the energy efficiency of projects, and it allows design teams to find cost-effective design solutions for owners at little to no cost to the project team.

We also see energy modeling as critical to integrating energy within our design lexicon and embedding sustainability within our design culture and process.

But the AIA 2030 Challenge, and new construction in particular, addresses just a fraction of global CO₂ emissions; to halt climate change, we must address the full picture. We must look at carbon more broadly. We must expand the equation to incorporate operational and embodied carbon as well as existing building stock alongside new construction and major renovations.

To that end, we’ve developed an Embodied Carbon Plan, which layers onto our energy plan to address the full picture of our climate impact. We are starting with the basics—increasing education and awareness around embodied carbon, developing resources to help our design teams target the parts of the building that have the most embodied carbon impact, and making improvements to our master specs to cut out embodied carbon where costs are low but impact is high. We are also targeting a handful of projects every year to do a deep dive into carbon, and publicly sharing what we’ve learned.

Achieving the 2030 Goals by 2030



CASE STUDY

Do You Know Your Carbon Flows?

Tobin Montessori and Vassal Lane Upper School, Cambridge, Massachusetts

A client and community passionate about holistic sustainability led us to take a broad approach to carbon in the design of Tobin Montessori and Vassal Lane Upper School. Major design decisions, including the option to renovate or build new, were influenced by explorations into operational and embodied carbon and a comprehensive study of carbon flows. We also conducted continuous assessments into how to further reduce carbon with structural-system design and selection, material specifications, and other directives such as on-site photovoltaic capacity.

Between Trees and PVs

The tight urban site prompted the team to ask, “Do PVs or trees offer more carbon savings?” While PVs won out in our analysis over a sixty-year lifespan, the team opted for the trees, noting that the [benefits of biophilia](#) in this instance would have greater impact.



CASE STUDY

In With The Old

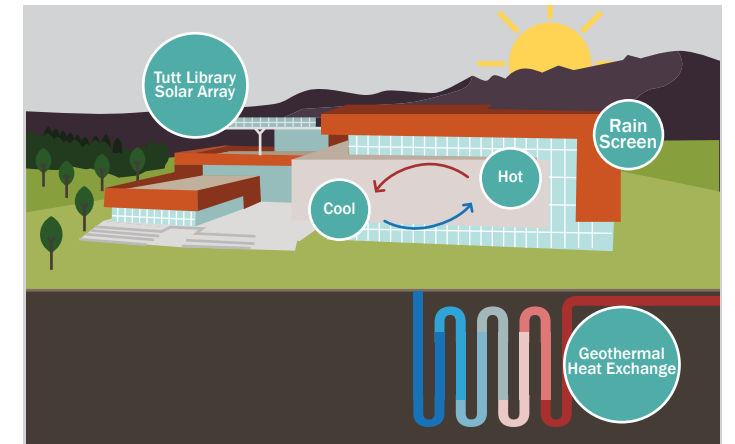
Tutt Library Renovation and Expansion at Colorado College, Colorado Springs, Colorado

The Tutt Library at Colorado College, the nation's largest carbon-neutral and net-zero footprint academic library, is a case study of how embodied carbon and operational carbon can work together to achieve higher levels of building performance.

Colloquially known as “the toaster building,” the 1960s library appeared at face value to be long past its useful life. Among its many dated elements, the narrow vertical “toaster slot” windows created dark, inwardly focused spaces with very little outdoor connection. But also core to the college’s ethos is a campus-wide commitment to carbon neutrality. When explored through this lens, the project proved to be an ideal candidate for Net Zero Energy (NZE). To meet NZE goals, a major design challenge was keeping the glazing to a maximum of 35 percent of the total envelope. The design achieved this goal with a fourth floor addition that employs a clever ribbon-like façade of red paneling and glazing that wraps the original building and joins old with new. This “ribbon,” as well as the replacement of select concrete panels with high-performance glazing in active student zones, brings in more daylight and views in key areas of activity while preserving much of the existing envelope.

Breaking the Cost Barrier

The NZE Tutt Library renovation and expansion reduced the campus’ annual energy costs by nearly \$83,000—without increasing the upfront project cost. This outcome reinforces the point that when carefully and thoughtfully designed, Net Zero Energy in renovation projects is attainable.



PFEIFFER—A PERKINS
EASTMAN STUDIO

06

Materials

Materials play a big role in our mission to improve both people and planet. We strive for all of the materials we use to have a net-positive benefit, and these are the steps we are taking to get there.

Where We Are

We established a Materials Action Plan in 2021, which sets goals for materials education and selection. As a result of implementing the first phase of this action plan, we have seen a significant growth of interest in material health across the firm.

We have aligned our materials efforts around the AIA Architecture & Design (A&D) Materials Pledge to focus on the impact that materials have across the pledge's five categories. We have a responsibility to advocate that all aspects of the selection and use of materials be an integral part of our design process on every project.

We held firm-wide presentations targeting the questions surrounding WHY materials matter and HOW we can make a positive impact with our material selections. We also invited guest speakers to present on the A&D Materials Pledge and how the industry is trending towards alignment around the pledge.

We created a central resources page for material knowledge, launched a discussion page to share knowledge across the firm, and formed active materials working groups. We also established and launched preliminary firm-wide benchmarking targets and resources.

Where We Are Headed

We are developing continuing-education content that includes presentations, guest speakers, case studies, one-pagers, and library programming. Our goal is to establish a baseline level of knowledge around the impact of material production, specification, and use. We also want to empower a growing body of experts across the firm.

We are also focusing on developing and tracking action items. In 2022, we have asked all project teams to identify at least ten products on every project with associated transparency documentation so our teams can better consider the human and environmental health impacts of their material selections. We also encourage teams to set material-health goals that address at least one of the five A&D Materials Pledge categories and provide sample vetting criteria that teams can adopt. We will continue to develop metrics and mechanisms to facilitate the tracking of materials and their impact because the process is not as straightforward as, say, tracking energy.

Furthermore, as of the publishing of this document, we will no longer accept materials into our libraries that are not either entered into Mindful Materials or that don't have at least one associated sustainability criteria item. We will be strengthening and implementing this policy throughout the year.

AIA Architecture & Design (A&D) Materials Pledge:

- Human Health
- Societal Health
- Ecosystem Health
- Climate Health
- Circularity



WASHINGTON UNIVERSITY IN ST. LOUIS, MCKELVEY HALL, ST. LOUIS, MO | LEED GOLD WITH RIGOROUS FOCUS ON LOW-EMITTING MATERIALS FOR ALL PRODUCT CATEGORIES

CASE STUDY

Less Is More

Perkins Eastman Pittsburgh Studio, Pittsburgh, Pennsylvania

As we were designing the space for our own Pittsburgh studio, we challenged ourselves to prove that healthier materials—for both people and the planet—could be specified on a tight time frame without exceeding the budget. Our first step was to significantly reduce our material palette at the outset, so we could focus more effort on selecting quality over quantity. We eliminated rubber base and unnecessary bulkheads, to name two examples. We also selected products that had transparency information such as Environmental Product Declarations (EPDs) and Health Product Declarations (HPDs). We then optimized our selection by honing in on red-list-free products—those that contain no known harmful chemicals. We also introduced handmade elements from Pittsburgh-based artisans, rounding out our material palette to consider all five elements of the A&D Materials Pledge, including societal health.

Cutting the Carbon

We did a comparison of our new Pittsburgh studio with comparable recent workplace projects, and we found that our material palette reductions and design decisions resulted in 34 - 44 percent less embodied carbon.



07

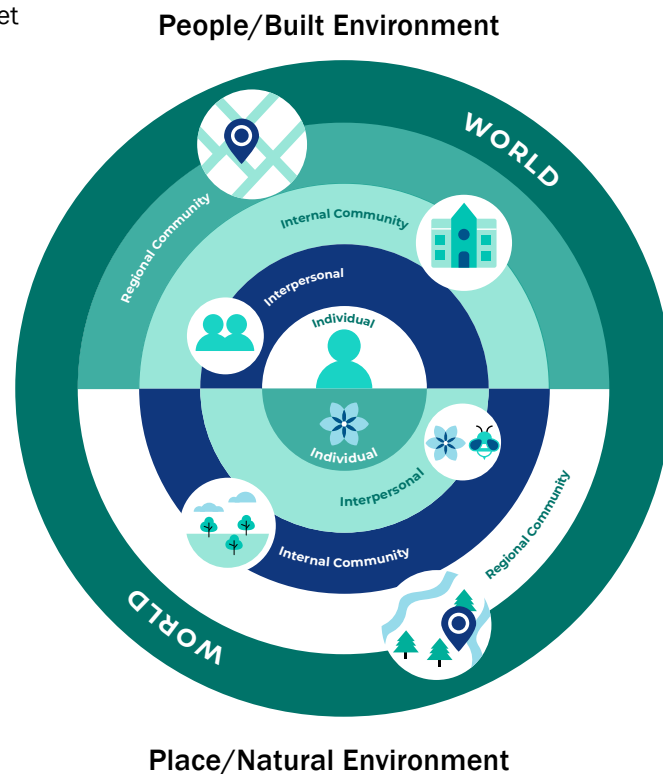
Health and Wellness

Our work must have a lasting and positive effect on the health and wellness of people and communities.

Where We Are

Wellness has become a buzzword in the design industry, especially since the onset of the COVID-19 pandemic. But the term too often focuses on individual wellness and the role the built environment plays in an individual's personal health and well-being. While this can and should be a priority for the architectural community, we should not forget how intrinsically connected our personal wellness is to the wellness of others and to the planet. Based on our collective experience over the last several years, we know we can no longer look at issues of wellness in isolation.

Perkins Eastman's Holistic Approach to Wellness



We are proposing a new and more comprehensive approach called Holistic Wellness, which examines wellness across multiple scales and perspectives. These lenses include people and place as well as individual, community, region, and world. Studying this issue from multiple angles will bring what is currently a disparate approach to sustainability (via multiple rating systems and targets) into a sum greater than its many parts.

Our Holistic Wellness approach includes regular surveys of existing and new literature. We're also contributing with our own multiple original research studies that investigate the intersection between the wellness of people and that of our planet.

Pre- and Post-Occupancy Evaluations

Part of this original research involves conducting pre- and post-occupancy evaluations on our work. Beyond typical post-occupancy evaluations (POEs), we conduct holistic evaluations that survey building occupants to gauge their perception of the spaces they were occupying, and we deploy a series of sensors that tracked key indoor environmental quality metrics to quantify building performance around health and wellness. This data helps us to understand more about how our design

decisions impact health and wellness so we can continue to make informed decisions.

Latrobe Prize Research Grant

The AIA College of Fellows in 2019 awarded the Latrobe Prize to Perkins Eastman and its collaborators at Drexel University, which included a \$100,000 research grant. The firm then secured additional funding from an industry partner, J+J Flooring, to further this research effort. Our ongoing study is evaluating twenty-eight schools across two districts to assess the impact that school modernization has on educational quality, indoor environmental quality, community connectivity, and the impact that these variables have on student and teacher performance. Due to the pandemic, this research effort is still underway and is expected to be completed within a year.

Chicago Studio WELL Platinum Certification

For our new Chicago studio, we tested out the WELL Building Standard for the first time and achieved a WELL v2 pilot Platinum certified space. While this project was completed in 2019, we finalized the certification in 2020 and spent the last year applying the lessons we learned to subsequent office relocations such as our Pittsburgh office and on many of our current projects pursuing WELL Certification.

CASE STUDY

Net Zero Energy/ Net Positive Education

John Lewis Elementary School, Washington, DC

The new John Lewis Elementary School is targeting triple certification—Net Zero Energy, LEED Platinum, and WELL Gold—making it a prototype for the concept of holistic wellness in public schools. Overlaying three rating systems concurrently onto an already fast-paced project was daunting, but by using our framework for holistic wellness and zooming into the shared strategies between these three goals, we were able to deliver a school that not only reaches Net Zero Energy, but also creates a learning environment with a heavy focus on improved indoor environmental quality. Ultimately, this project represents what we call “Net Positive Education,” a term we have trademarked that means applying the rigor of a Net Zero Energy process with a careful focus on occupant health and wellness to deliver a project that can truly support its ultimate goal: quality education.

Breathing Easy

Ventilation and air filtering systems traditionally require large amounts of energy to operate. Thanks to recent improvements in technology, however, air quality and energy efficiency do not have to be contradictory goals. John Lewis Elementary School has a ventilation rate that is **30 percent higher** than what is required by code—and still meets its Net Zero Energy target.





OUR OPERATIONS

08

Corporate Sustainability Agenda

Understanding our operations' impact and finding appropriate solutions to reduce it is the basis of our corporate sustainability agenda. To support this agenda, we track our data, analyze our progress, share our findings transparently, and set our goals to facilitate improvement.

Remote working conditions brought a new approach to how we operate in the virtual world. Though it required adaptations to our typical operations, we became more skilled and efficient with technology, and we reduced our firm's carbon impact through less travel and less office resource use.

While we acknowledge this change in our reduced carbon footprint is not reflective of the reductions we can expect moving forward, we believe our new hybrid working policies will inevitably change our carbon footprint. In this report, we share our available operational data from 2019 when we were working 100 percent in the office.

Our plan is to compile operational sustainability data on an annual basis and establish measurable progress reports for the future. We firmly believe we should set an example for our clients and industry peers by integrating sustainability into our work, operations, and culture. This report is an important step toward realizing this mission.



THE DISTRICT WHARF, WASHINGTON, DC | LEED FOR NEIGHBORHOOD DEVELOPMENT AND NEW CONSTRUCTION

09

Perkins Eastman's Footprint

With twenty-four studios worldwide and more than 1,100 employees, it is our responsibility and desire to promote sustainability through both our design work and our operations.

The connection between our design work and how we operate is crucial. We know that our employees' health and well-being directly impacts the quality of our work and, ultimately, our bottom line. According to the World Green Building Council, 90 percent of a company's operating expenses typically go toward human resources. To have the greatest impact on operating expenses, our focus should be on our people in addition to our buildings.

In 2016, we developed our first Sustainable Operations Manual, which lays out the requirements for improving the operations of our company at an office level. The manual covers the topics of energy and carbon, waste, traveling and commuting, indoor environmental quality, and purchasing and supply, and was recently updated and integrated into our Perkins Eastman Operations Manual.

To support our corporate sustainability efforts, each office is responsible for annually tracking and reporting the sustainability of their operations to demonstrate how they are meeting or exceeding the criteria outlined in the Sustainability Operations Manual. This data will be used to track our progress so that we can target improvements firm-wide. In the following pages we outline our current progress in each of the main categories of our operations.



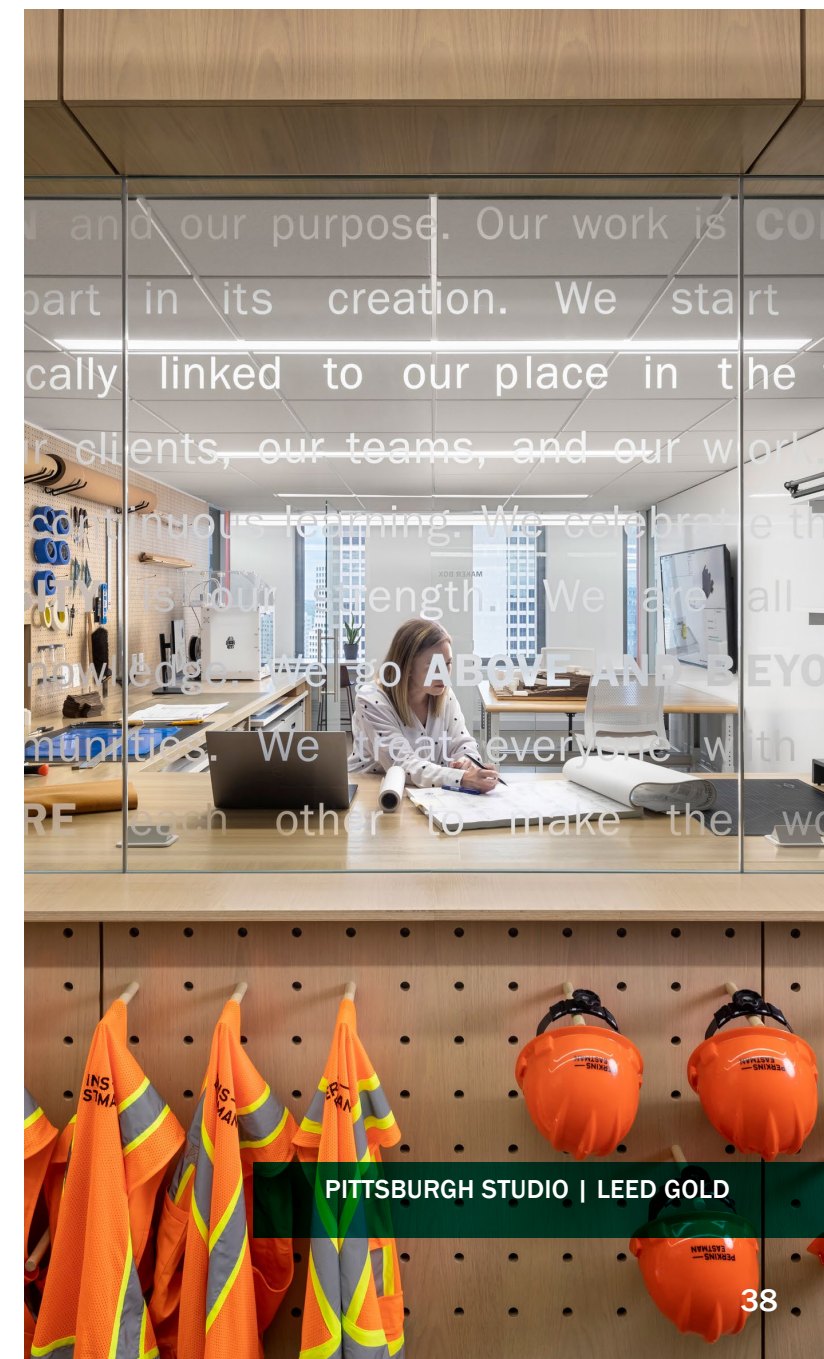
STAMFORD STUDIO | LEED SILVER



CHICAGO STUDIO | WELL V2 PILOT PLATINUM



WASHINGTON, DC STUDIO | LEED GOLD



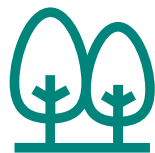
PITTSBURGH STUDIO | LEED GOLD

Energy/Carbon

We are aggregating the energy and carbon associated with our office operations alongside with the energy and carbon data of our design work. We estimate our global offices' combined footprint to amount to 709.7 Metric Tons of Carbon Dioxide (MT CO₂.) In layman's terms, 86 acres of forest would be needed every year to offset these emissions.

Estimated CO₂ Emissions from Perkins Eastman Studios Operation: 709.7 MT CO₂

It would take **86 acres of forest or 60,182 fully grown trees** to absorb these emissions annually



Waste

We are conducting waste audits in our offices to categorize and weigh our office waste and identify how to make improvements. In our Washington, DC, office we found that around 80% of our office waste could be diverted, and began planning options for composting to expand our waste diversion beyond recycling. Beginning in 2023, we plan to re-launch waste auditing across all of our offices.

Washington, DC Office Weeklong Waste Audit

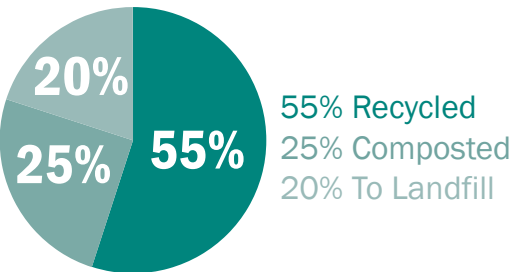
140 lbs Recycled



52 lbs To Landfill



64 lbs Composted



*PE DC Office does not have city or building management composting program

Traveling and Commuting

Prior to the pandemic, we were conducting firm-wide transportation audits to assess our firm's daily commuting habits and support improvements. We plan to resume this auditing in 2023. In terms of business travel, our last complete year pre-pandemic, 2019, will be used as our baseline to see how our new hybrid work policy and increased virtual connectivity across the firm affects our business travel.

Metric tons of CO₂ Generated by Business Travel in 2019

1,029 MT CO₂



Purchasing and Supply

We are addressing purchasing and supply on many fronts—reducing and improving our paper products and office cleaning supplies, implementing a sustainable catering policy, and becoming a member of Material Bank to reduce our emissions associated with sample shipping and packaging.

8,118 Miles Driven



Equivalent greenhouse gas emissions eliminated through the purchase of carbon credits for our sample shipments by Material Bank

Data from Material Bank

Next Steps

There is still more to do. For example, we've become ever more reliant on our technology (computers) and our data, but all of these things make an environmental impact. We need to start accounting for this in our annual tracking, and adding it to our overall carbon footprint equation to understand impact, and tackle progress.



OUR CULTURE

MARINHEALTH MEDICAL CENTER OAK PAVILION, GREENBRAE, CA |
LEED SILVER

10

Knowledge Management and Education

Where We Are

Education is key to our strategy of integrating sustainability within all of our work and operations. At Perkins Eastman, we have rigorous education programs for our staff at all levels. Our goal is to capture new developments in the industry, learn from our own experiences, and improve our practices. We strive to provide comprehensive training, workshops, information sessions, and round-table events to share knowledge with our colleagues, clients, partners, and consultants.

Perkins Eastman has four structured education and knowledge-management programs:

- Sustainability Education Modules
- Sustainability Rollouts
- Sustainability Trainings
- Accreditation Study Groups

2021 Educational Outreach

11 Total Rollout Trainings

3 Material Health Trainings

7 Sustainability Lead Onboarding Sessions

16 Office-Specific Presentations

Sustainability Education Modules

Perkins Eastman has established an online database called Sustainability Education Modules.

Each module highlights an aspect of sustainability and answers the following questions: What is the subject? Why is this an important topic? How can we integrate it into our practice? To date, we have rolled out eleven education modules.

We also organize firm-wide roundtable conversations parallel to the education modules. External and internal guest speakers join these sessions to discuss best practices, case studies, building technologies, and sustainability-related features. Embodied Carbon, Inclusive and Equitable Design, and Resilient Built Environment roundtables are some examples of our efforts to share knowledge with our colleagues and industry peers.

First Module:
February 2020



Online Depository of
useful information and
practical guidelines



Collaboration firm-wide
Sustainability Team, Knowledge
Management Subcommittee
and Other Subcommittees and
Perkins Eastman groups.



Firm-wide roundtable
discussion parallel to the
education module's content.



Sustainability Rollouts

We conduct Sustainability Rollouts each year. In these firm-wide events, we highlight the firm’s initiatives, provide educational content on relevant topics, and connect with each other regarding sustainability. Throughout the pandemic, we held these rollouts virtually, delivering the content over the course of a month.

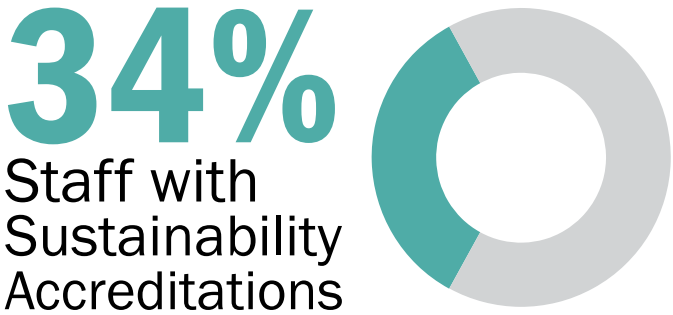
- Sustainability at Perkins Eastman
- Material Health & Design at Perkins Eastman
- The Timeline of a High-Performing Project
- AIA Framework for Design Conversation: Talking to Clients about Sustainability Goals
- Breaking the Cost-Barrier Through Data & Design
- Greenwashing Happy Hour

LEED Accreditation

Increasing our number of accredited staff is a company priority. Currently, 34 percent of our staff hold a type of sustainability accreditation, such as LEED, WELL, Certified Passive House Consultant. To help our staff achieve accreditation, Perkins Eastman has made the following efforts:

- Exam fee reimbursement policy
- Credential renewal reimbursement policy
- Unlimited exam study access for all employees via GBES
- Internal study groups

Our first goal is to increase the accredited staff number percentage to fifty percent and then continue our efforts to promote an even higher accreditation percentage in the future.



GOODWIN HOUSE | ALEXANDRIA, VA | TARGETING LEED SILVER

11

Diversity, Equity and Inclusion (DE&I)

Social sustainability is an indispensable part of our sustainability philosophy at Perkins Eastman. We strive to create more just, diverse, equitable, and inclusive environments in both our operations and our work.

Perkins Eastman has comprehensive policies, working groups, and action items to foster Diversity, Equity, & Inclusion in our corporate culture. We endeavor to enrich our culture of inquiry and design through trust, respect, and collaboration. We strive to offer an environment where everyone—without prejudice—is empowered to reach their full potential as individuals. We commit to fulfilling our Human by Design ethos through nondiscriminatory, intersectional, and equitable business practices. We continuously strive to improve our methods to deliver sustainable cultural change, emphasizing diversity, vitality, and conscious inclusion as essential components.

DE&I Intentions

- To identify and dismantle barriers to success, contribution, and recognition
- To advocate for diverse representation on project teams and in client meetings without tokenism
- To ensure that there are clear pathways to leadership to better represent the diversity of the firm, at the office, and firm-wide levels
- To encourage a culture of continuous learning, advocacy, and growth at all levels
- To positively influence our industry, our communities, and our society to bring about long-term systemic change
- To celebrate our unique and distinct cultures and identities across the globe

JUST Label

Perkins Eastman DC received a **JUST** label from the International Living Future Institute (ILFI) in 2021. The ILFI created JUST to measure social justice and equity in the workplace and is a voluntary disclosure and transparency platform.

Perkins Eastman is currently working to attain the JUST label firm-wide, and initiating efforts to improve the label's priority social justice indicator categories.

Just.

Organization Name: Perkins Eastman DC
Organization Type: Architecture
Headquarters: District of Columbia
Number of Employees: 42

Social Justice Indicators:

Diversity & Inclusion

■ ■ ■ ■ Gender Diversity
 ■ ■ ■ ■ Ethnic Diversity
 ■ ■ ■ ■ Inclusion
 ■ ■ ■ ■ Engagement

Employee Benefits

■ ■ ■ ■ Health Care
 ■ ■ ■ ■ Retirement Provision
 ■ ■ ■ ■ Family/Medical Leave
 ■ ■ ■ ■ Training/Education

Equity

■ ■ ■ ■ Full-Time Employment
 ■ ■ ■ ■ Pay-Scale Equity
 ■ ■ ■ ■ Freedom of Association
 ■ ■ ■ ■ Living Wage
 ■ ■ ■ ■ Gender Pay Equity

Stewardship

■ ■ ■ ■ Local Communities
 ■ ■ ■ ■ Volunteering
 ■ ■ ■ ■ Animal Welfare
 ■ ■ ■ ■ Charitable Giving
 ■ ■ ■ ■ Positive Products

Employee Health

■ ■ ■ ■ Physical Health
 ■ ■ ■ ■ Well-Being

Purchasing & Supply Chain

■ ■ ■ ■ Equitable Purchasing
 ■ ■ ■ ■ Supply Chain

THE SOCIAL JUSTICE LABEL 2.0

PED-001

EXP. 07/01/2024

INTERNATIONAL LIVING FUTURE INSTITUTE™



DIWALI ACTIVITY, PERKINS EASTMAN WASHINGTON, DC, OFFICE

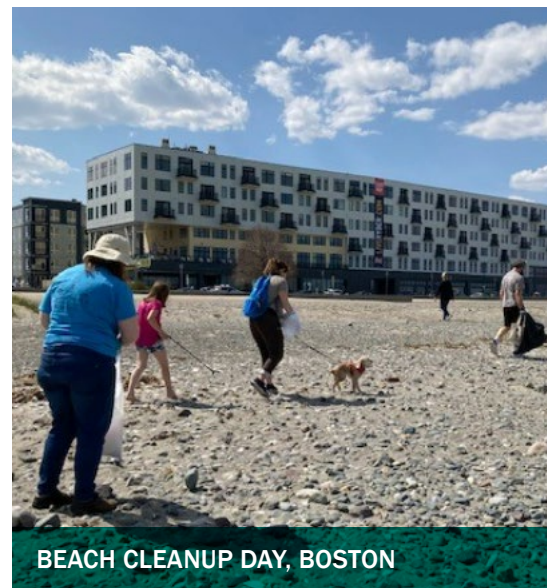
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Celebrating Sustainability

At Perkins Eastman, we are proud to have colleagues in all of our offices who go above and beyond. In addition to our firm-wide planning, each office highlights sustainability in their local offices.



PITTSBURGH TREE PLANTING



BEACH CLEANUP DAY, BOSTON



PARKING DAY, GUAYAQUIL



CLIMATE STRIKE, PITTSBURGH



DAYLIGHT HOUR, STAMFORD



BIG GREEN COMMUTE, WASHINGTON, DC



BIG GREEN COMMUTE, MUMBAI



CLIMATE STRIKE, CHARLOTTE



CLIMATE STRIKE, COSTA MESA

13

Thought Leadership and Advocacy

We commit to tracking our progress, so our actions have a measurable, positive impact. We won't give up, and we won't let ourselves become complacent. We commit to doing everything we can within our power, and we commit to advocating for change.

We have advocated for change at the local, state, and federal levels. Our efforts have included lobbying to change code language to better support existing building preservation, supporting a Mindful Materials group in India, and signing the AEC industry letter to the Biden-Harris Administration about the importance of addressing the built environment in pursuits on climate policy.

We have also formed a Research and Advocacy Subcommittee to develop a better firm-wide approach to thought leadership and advocacy around sustainability initiatives, allowing for localized engagement.

Beyond advocacy, we continue to think big. Big problems require big solutions; our focus on research and thought leadership is critical to our approach.

We have explored climate change and sustainability through many lenses on "Insights" Perkins Eastman's thought leadership platform. Some of our most important thought leadership and advocacy articles are listed below (www.perkinseastman.com/Insights):

Perkins Eastman Commits to Building Back Better

Next-Gen Schools: Good for the Climate; Good for the Kids

Material Evidence

Transformative Thinking

Bouncing Back

Zero for the Win



THE WHEELER, BROOKLYN, NY | LEED GOLD

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Green Coordinator Network

Sustainability Leads



ASHOKA LIBRARY, SONIPAT, INDIA | INDIA GREEN BUILDING COUNCIL LEED PLATINUM

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