



Sustainability Action Plan

In 1985 our firm designed the Knoll Assembly Building in East Greenville, Pennsylvania. With naturally-lit and human-scaled workplaces, this project foreshadowed many design principles central to today's response to the climate crisis—and was awarded retroactive LEED® Gold certification in recognition. **Our approach begins here.**



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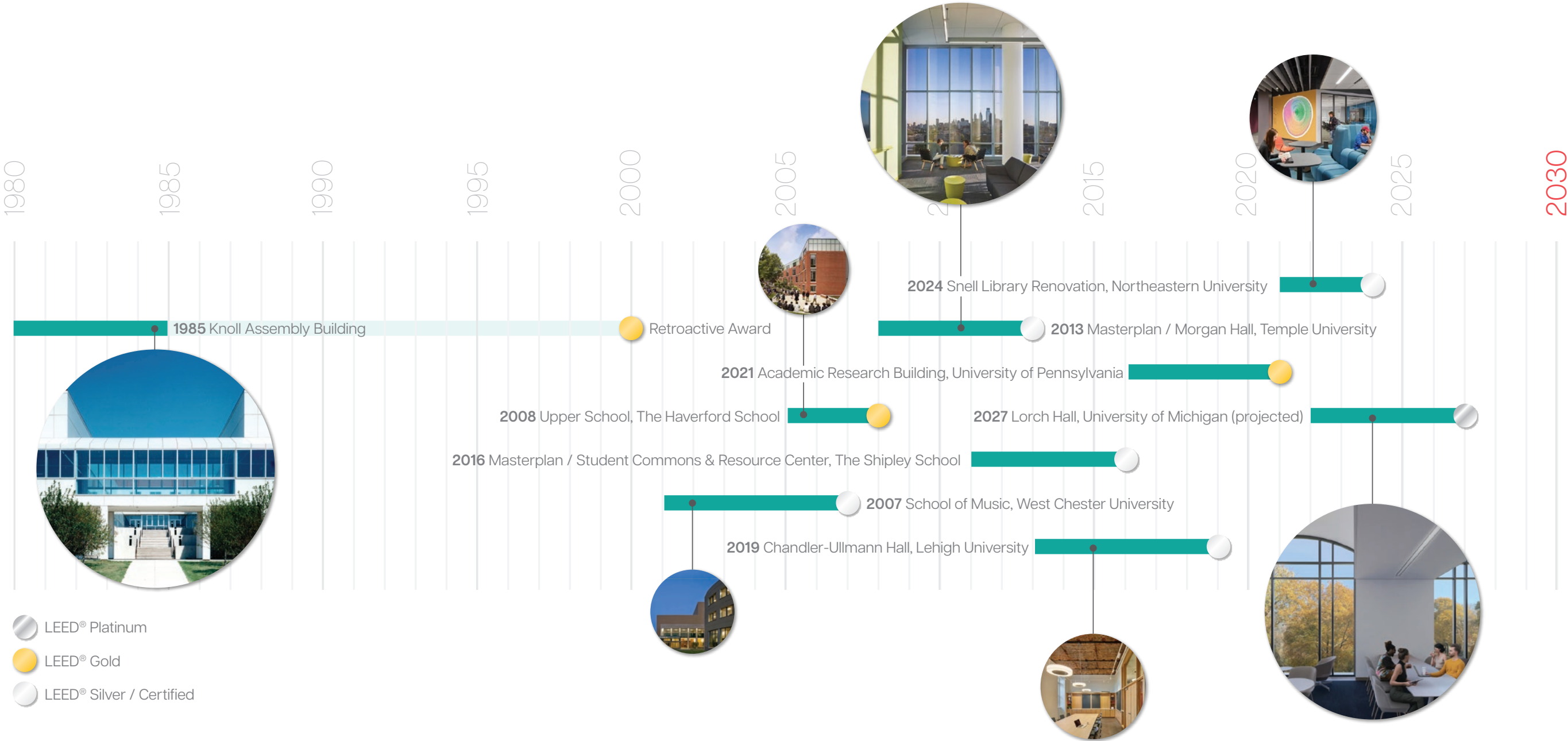
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01 Our Commitment



Upper School, The Haverford School | Bryn Mawr, Pennsylvania | LEED Gold Recipient

MGA Partners has a rich legacy of creating architecture that embodies a commitment to a broad view of sustainability. We do not limit our focus solely to ecological aspects of design, but rather we commit to an architecture that respects and dignifies the users of our buildings and the work performed and lives lived in them. This is accomplished through careful and sophisticated composition of spaces, sensitive attention to daylighting, an honest use of materials, and dedication to craft.

However, with the rapidly-changing climate and the increasingly urgent need to change the course of our industry's practices, **we recognize that we must step up our ambition.** A broad view of sustainability is not enough. Our pledge to the AIA 2030 Commitment marks an acceleration in our methodology and how we define and approach sustainable practices. As an industry, our interpretation of good design cannot be extricated from its performance as an environmentally responsible and health-driven architecture. We are both excited and inspired by the goals outlined in this Sustainability Action Plan and look forward to the challenges we will face to champion meaningful climate action through the spaces we make.

MGA Partners, a 20-person firm located in Philadelphia, hereby signs on to the AIA 2030 Commitment program and its goal of carbon-neutral buildings by the year 2030.

Amy Stein, AIA
Partner

Catherine Broh, AIA
Partner

Our Design & Approach

As architects, just as we constantly evaluate how our design solutions address goals of function, aesthetics, costs, accessibility, and safety, we must constantly ask how our design decisions promote ecological health and resilience. We recognize that our industry has a significant impact on greenhouse gas emissions, waste production, and the resulting environmental degradation. Accordingly, at MGA, we also recognize that we have a responsibility to expand our duty of care, viewing design excellence and climate action as inextricably linked. We commit to advancing a thoughtful and rigorous approach to design that recognizes the interrelated goals of promoting environmental stewardship, economic responsibility, and social equity.

IMPLEMENT INDUSTRY TOOLS

MGA will look to the **AIA Framework for Design Excellence** and the robust toolkits, resources, and strategies therein as a guide in the way we approach design decisions in current and future projects. In addition to our evaluation and reporting measures established in Chapter III (Goal Setting, Reporting + Evaluation), MGA will expand our use of the AIA Framework for Design Excellence Assessment, to evaluate not just completed projects, but ongoing projects as well.

- **Short-term (1-3 years):** We will begin to integrate use of the Framework as a design tool at each design phase on one project in year one, and every year will endeavor to add at least one more project per year, assessing our work at each design phase.
- **Long-term (3+ years):** Building on the lessons learned from increased integration of the Framework into our practice, we will establish a checklist for all projects to assist project sustainability leads in setting and tracking key project milestones and successful methodologies. We will also establish a means to track project performance throughout our documentation process.

SELECTIVE TEAMING



MGA will continue to collaborate with **forward-thinking, multidisciplinary project teams**, uniting our partners around integrating sustainable principles and practices cohesively across all phases of design. We will strive to engage with project partners who are 2030 signatories or who have sustainability goals that are consistent with or are even more ambitious than our own.

With LEED® Silver-certified Morgan Hall anchoring the southern end of the Temple campus, the university invested in high quality building and campus spaces to inspire sustainably-designed, quality architecture as a criterion for future development.



MATERIAL RESOURCES

MGA will continue to update the firm’s **material library**, implementing principles of the AIA Materials Pledge. We commit to considering manufacturing practices, embodied carbon, performance criteria, human health and ecosystem impacts, and end-of-life scenarios to make informed and responsible decisions when selecting materials and finishes.

- **Short-term (1-3 years):** We will conduct an evaluation of our current material library against the principles of the AIA Materials Pledge to identify areas for improvement and to establish a plan for improved sustainability-related documentation.
- **Long-term (3+ years):** We will sign the AIA Materials Pledge, revising this Sustainability Action Plan to include a materials-specific addendum outlining how we will implement the five action areas of the Pledge (human health, social health and equity, ecosystem health, climate health, and circular economy).

SPECIFICATIONS

MGA will develop **specifications packages** to reflect the above material considerations and continue to improve construction waste management plans that minimize waste generation, maximize reuse and recycling, and ensure proper disposal.

- Short-term (1-3 years): We will collect environmental product declarations (EPDs) for all relevant products in a selected project and work with engineers to continually assess the project’s total carbon footprint. In addition to EPDs, all LEED submittals will be tracked as part of the construction phase submittal process.
- Long-term (3+ years): Building on lessons learned, we will develop a product matrix tracking tool that future project teams can use in material selections and specifications. We will also work to build in-house capacity with BIM-integrated material life-cycle evaluation tools.

ENERGY MODELING AND ANALYSIS

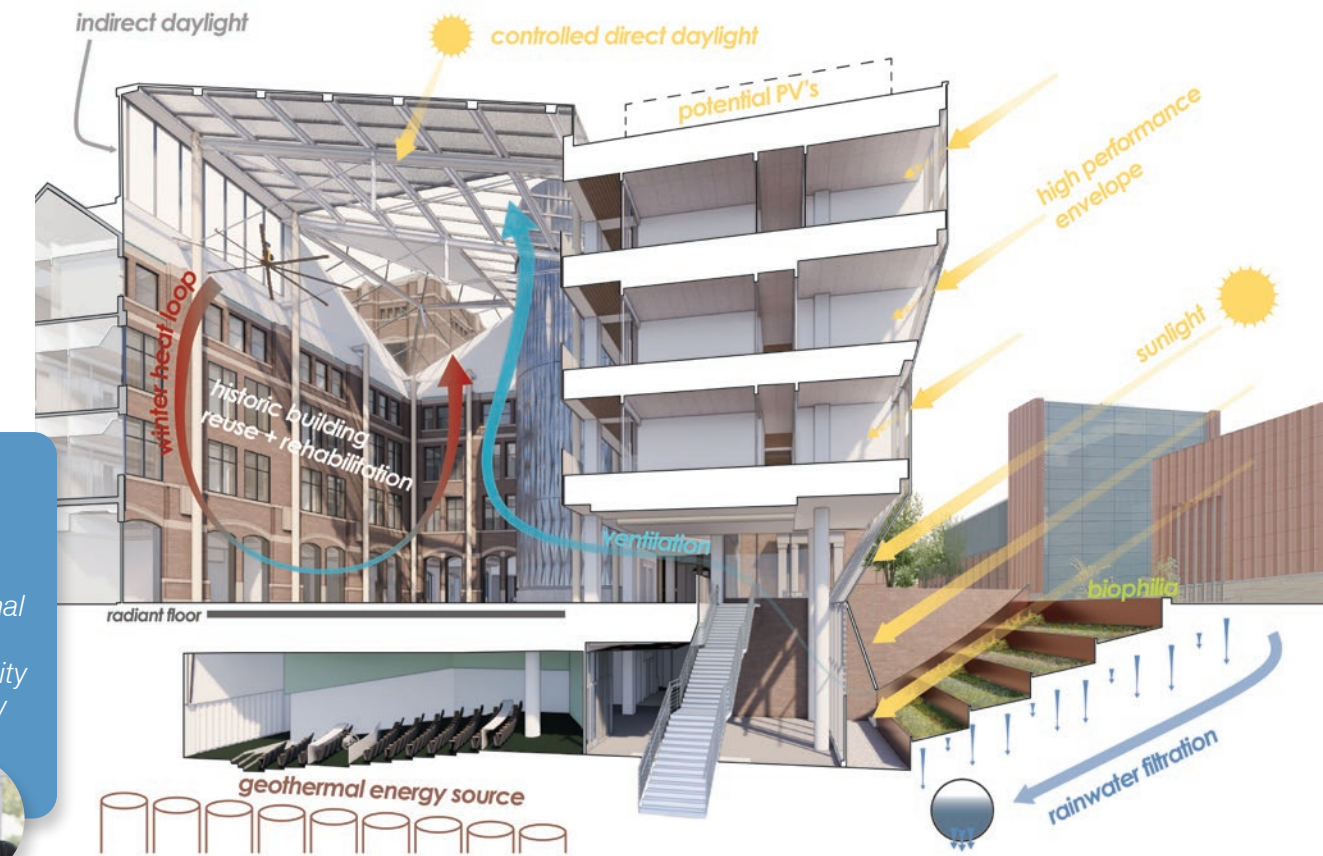
MGA will make **iterative energy modeling and analysis** a standard measure in each design phase. With a continually advancing understanding of a project’s projected performance and environmental impacts, we can leverage sophisticated data to advocate for strategies that improve performance and reduce negative impacts.

- Short-term (1-3 years): We will rely on our knowledgeable industry partners and also work to build in-house capacity with relevant software, including but not limited to Cove. tool, to regularly track each project’s progress against established energy reduction targets and simplify LEED project management.
- Long-term (3+ years): We will build on our experience with energy modeling and analysis to begin exploring whole-building life cycle assessments with future projects.

Our project at the University of Michigan is both a renovation of a historic building for a new century of use and a modern addition, which together will be our first Net-Zero Ready effort.

“We’re exploring how net-zero ready systems can be elegantly integrated into a historic building with rigorous programmatic needs. Every design move—light-diffusing glazing, geothermal wells below the foundation, reuse of select interior materials—is an opportunity to set a new benchmark for meaningfully sustainable academic buildings.”

Katie Broh AIA



03 Goal Setting, Reporting, & Evaluation

The journey to successful sustainable design entails tangible and meaningful improvements to the buildings we create. Thus, we must create a roadmap of specific, measurable, and time-bound goals and self-evaluate along the way. Each project can and should have additional goals to achieve, but our studio standard henceforth will be as follows.

LEVERAGING THE AIA DESIGN DATA EXCHANGE

Precedent projects, both internal and external, that demonstrate exceptional sustainable performance will be identified as **Anchor Projects** by our sustainability initiative group, the **2030 Integrated Design Committee**. These projects will be studied and shared across the office to inspire project teams to continually push sustainability ambitions further.

- Short-term (1-3 years): Anchor Projects completed by MGA will be analyzed and uploaded to the DDx by the 2030 Integrated Design Committee as a means to evaluate our existing sustainability metrics and establish a baseline from which we can measure our progress. The Committee will share the data collected with the studio as part of a lessons learned process.
- Long-term (3+ years): As more data on our projects' sustainable performance becomes available, we will communicate the data on our project pages and our website as key project metrics.

At the onset of each project, the project manager will assign a **Project Integrated Design Coordinator**. Project managers will be encouraged to select a team member that has not performed the role before – this will help to instill the knowledge in the entire studio, hence further intertwining sustainability and design in our practice.

The Integrated Design Coordinator's first task will be setting specific project benchmarks for energy reduction based on the DDx outputs for the project's projected EUI. These benchmarks and larger project sustainability goals will also be informed by lessons learned from relevant Anchor Projects.

The Integrated Design Coordinator will then oversee the documentation and evaluation of the project's carbon footprint and other building energy analytics utilizing the latest energy modeling tools, including but not limited to Cove. tool. The Integrated Design Coordinator will report this documentation to the AIA DDx (as well as a central database accessible to the entire studio) at every official drawing submission in the weeks following the deadline, as schedules permit.

- Short-term (1-3 years): In year one, we will identify one project to establish and incorporate the Integrated Design Coordinator role, then add at least one additional project per year. The Integrated Design Coordinator will host internal brown bag events to share progress with the 2030 Integrated Design Committee and the studio.
- Long-term (3+ years): By year three, we expect all projects in the studio to have Integrated Design Coordinators assigned on their teams, reporting metrics and sharing lessons learned.

METRICS

Projects will undergo a **sustainability review** with the 2030 Integrated Design Committee and firm leadership. If feasible, project teams will be encouraged to bring in a LEED consultant, climate engineer, or other sustainability professional to evaluate what has been measured and what can be done to further improve the project’s metrics. The sustainability review will evaluate a variety of metrics, including but not limited to:

- Energy Usage Intensity (EUI)
- Lighting Power Density
- Daylight Analysis
- Embodied Carbon
- Detailed Systems Operations and Monthly Utility Usage
- Envelope Performance: Design and Post-Occupancy

POST-OCCUPANCY

MGA will include **post-occupancy evaluations** in all of our professional services proposals. Project teams will be rigorous and systematic in the post-occupancy evaluation of our buildings to confirm how systems and materials perform – aesthetically, functionally and in terms of sustainability. The data collected from these evaluations will be maintained in a database accessible to the entire studio. Familiarization with how our buildings truly perform post-occupancy will help us understand the long-term impacts of our design decisions and, in turn, empower us with the evidence to demonstrate to current and future clients the value of those decisions.

- Short-term (1-3 years): We will incorporate post occupancy into project proposals and expect to have at least one post-occupancy study per year from which to learn best practices. We will work to define the scope of the post-occupancy studies by project, encompassing the items that were most critical during the design and construction process that should be reviewed once the building is operational, such as resource consumption, systems maintenance, programming functions, occupant satisfaction, and durability of the materials and details.
- Long-term (3+ years): We expect that all proposals will include post occupancy evaluation services and we will have a refined value-add statement that substantiates the services.

The post-occupancy study of the Academic Research Building at Penn involved a comprehensive evaluation of the proposed energy model against actual monthly utility information—yielding important insight for improvements to achieve greater performance efficiencies.



“For this project, advanced building technologies deliver on ambitious campus performance and resilience goals. Studying the efficacy of these technologies in action helps us quantify the value of setting high sustainability ambitions—and communicate that value to our current and future clients.”



Katie Broh AIA

04 Training & Education

As research, innovation, and methods in sustainable practice rapidly evolve in our field, we must continue to invest in education and training to keep up to date on best practices. Our commitment to continuing education and internal knowledge sharing will ensure we are consistently building capacity and professional sustainability literacy within our design teams. With the following goals we aim to empower our staff, equipping them with the latest knowledge, tools, and skills to deliver on the AIA 2030 Commitment targets.

INTERNAL KNOWLEDGE SHARING

MGA will host regular **internal professional development and training** opportunities for staff in the form of in-office presentations, lunch and learns, software training, and shared educational resources, increasingly prioritizing those related to sustainable methods and materials. MGA will also encourage project teams to share insights, experiences, and lessons learned from implementing the robust building performance and energy reduction evaluations outlined in Chapter 3 (Goal Setting + Evaluation), facilitating internal discussions around how we can continually improve with each project.

- Short-term (1-3 years): We will hold quarterly staff meetings focused on sustainability, with varied topic-focused agendas to include technical brown-bag sessions, invited guest speakers, and other educational content.
- Long-term (3+ years): We will host biannual half-day studio workshops focused on MGA's performance relative to our Sustainability Action Plan. These workshops will include project sustainability reviews highlighting selected projects' goals and performance; provide an update on staff credentials, conferences and seminars attended, and current DDx reporting; and offer an open forum to share ideas related to the firm's sustainability initiative.

STAFF CERTIFICATION & CONTINUING EDUCATION

MGA will continue to support staff both culturally and financially in obtaining sustainability and resilience credentials, such as LEED AP, WELL AP, Living Future Accredited, and Certified Passive House.

- Short-term (1-3 years): In the quarterly sustainability-focused staff meetings, we will educate staff members on available sustainability and resilience certifications and how MGA can support staff in obtaining these credentials.
- Long-term (3+ years): Currently, 31% of our technical staff have or are pursuing sustainability accreditation. We aim to achieve a 75% credentialing rate by 2030.

MGA will also encourage staff to expand their **involvement in local and national professional organizations** to include those dedicated to advancing sustainable design, participating in webinars, conferences, and other educational events and sharing key takeaways from these events with the studio.

05 Outreach, Advocacy, & External Knowledge Sharing

In addition to our internal education and knowledge sharing commitments, we also aim to engage our wider community, industry partners, and clients in promoting sustainable design principles and practices. At MGA, we recognize that it is no longer sufficient to simply participate in the dialogue around sustainability in the built environment—we must push the dialogue further. We aim to inspire innovation, collaboration, and meaningful action in our community.



COMMUNICATIONS

MGA will **publicize our participation in the AIA 2030 Commitment** and consistently share our progress and best practices with our peers.

- Short-term (1-3 years): MGA will identify as signatories to the AIA 2030 Commitment in official marketing materials to clearly communicate our values and sustainability goals to prospective clients, partners, and staff.
- Long-term (3+ years): We will dedicate a section of our website to Sustainability at MGA where we will publish our Sustainability Action Plan, highlight sustainability results achieved in individual projects, and share firm-wide progress against key energy reduction targets.

MGA will engage in **proactive conversations** with our clients, stakeholders, and multidisciplinary project teams, leveraging our growing expertise to advocate for energy-efficient and sustainable design strategies at the earliest practicable stage of each project. In doing so, we will encourage the establishment of clear, tailored sustainability goals, as outlined in Chapter 3 (Goal Setting, Reporting + Evaluation).

- Short-term (1-3 years): MGA will initiate proactive conversations on Anchor Projects with our clients, stakeholders, and project teams to advance sustainable initiatives, regardless of the sustainable certification being pursued.
- Long-term (3+ years) MGA will incorporate into the design process a sustainability goal-setting workshop with the internal team and consultants at the outset of all projects. MGA will also incorporate a sustainability goal-setting workshop into the client engagement process in early phases to establish parameters and goals and maximize the project's impact.

COMMUNITY

MGA will aim to **expand participation in thought leadership events**, conferences, community outreach opportunities, and other presentations sponsored by local and national professional organizations dedicated to advancing sustainable design, such as the AIA Committee on the Environment (COTE) and the U.S. Green Building Council.

- Short-term (1-3 years): MGA will participate in COTE and attend lectures and conferences to begin embedding ourselves in the narrative and professional community dialogue on Sustainable Design.
- Long-term (3+ years): MGA will develop presentations to share at conferences and events to share our lessons learned and advance the dialogue on Sustainable Design.

Building on our staff's existing commitment to **community service**, MGA will organize a yearly engagement with a local organization dedicated to environmental sustainability and/or environmental justice in our community, such as PHS Tree Tenders, Love Your Park, Philly Spring Cleanup, and PARK(ing) Day.

- Short-term (1-3 years): Within the 2030 Integrated Design Committee, we will assign a Community Outreach Coordinator who will take on the role of identifying and organizing volunteer opportunities for the firm's participation.
- Long-term (3+ years): We will publicize our upcoming participation in these community service events, inviting and encouraging our local network to participate as well.

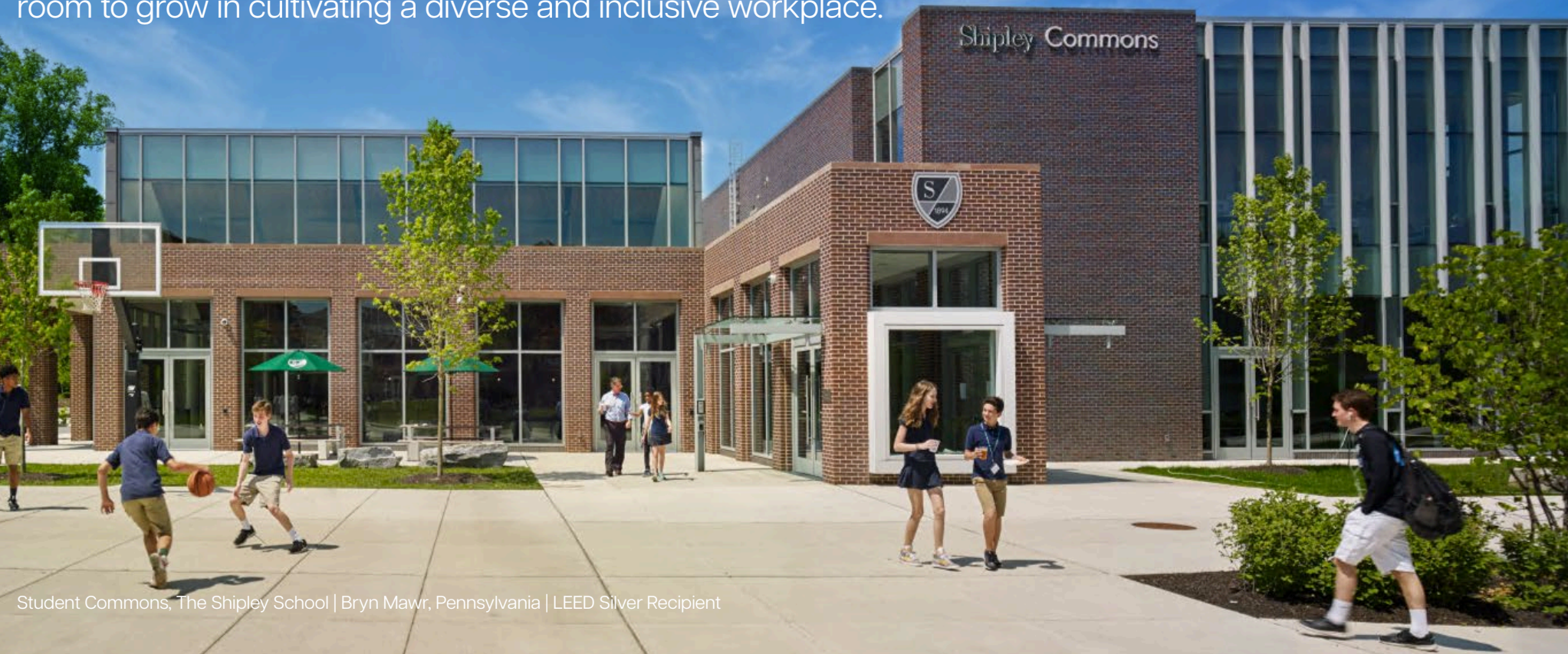


MGA Partners is a perennial participant in many community service efforts. Our drives for Tree Tenders, Philabundance, Project Home, and Parking Day (above) generate energy and financial support for these social equity organizations.



Operations & Outlook

As with any business, there is a carbon cost to our day-to-day operations. In examining how externally we can be stewards of both ecosystem and human health in the spaces we create, we must also examine how internally we can reduce our own carbon footprint and advance health-promoting policies for our staff. Furthermore, we recognize that issues of sustainability and equity are interrelated and must be addressed in tandem. We are proud of our status as a women-owned and led small business. We also acknowledge there is always room to grow in cultivating a diverse and inclusive workplace.



Student Commons, The Shipley School | Bryn Mawr, Pennsylvania | LEED Silver Recipient

INTERNAL OPERATIONS

MGA will **conduct an analysis** of our current carbon footprint and identify areas for improvements in our operational practices, including but not limited to energy efficiency, commuting and travel, expanded waste diversion efforts, and sourcing of supplies.

- Short-term (1-3 years): We will establish a team to assess the sustainability of our current business operations and submit a proposal for improvements that focus on our physical space and operations impact.
- Long-term (3+ years): We will expand our assessment and improvements of our business operations by focusing on the energy consumption required by the digital operations of our studio.



In 2024 and 2025, MGA was recognized by AIA Pennsylvania as an **EPiC Firm**, committed to supporting

emerging professionals and young architects in four critical areas: (1) licensure, (2) leadership and professional development, (3) career advancement opportunity, and (4) commitment to equity, diversity, and inclusion. We aim to maintain our status as an EPiC Firm and explore additional opportunities for company certification related to sustainability, equity, and diversity in our practice, such as the Just Label.

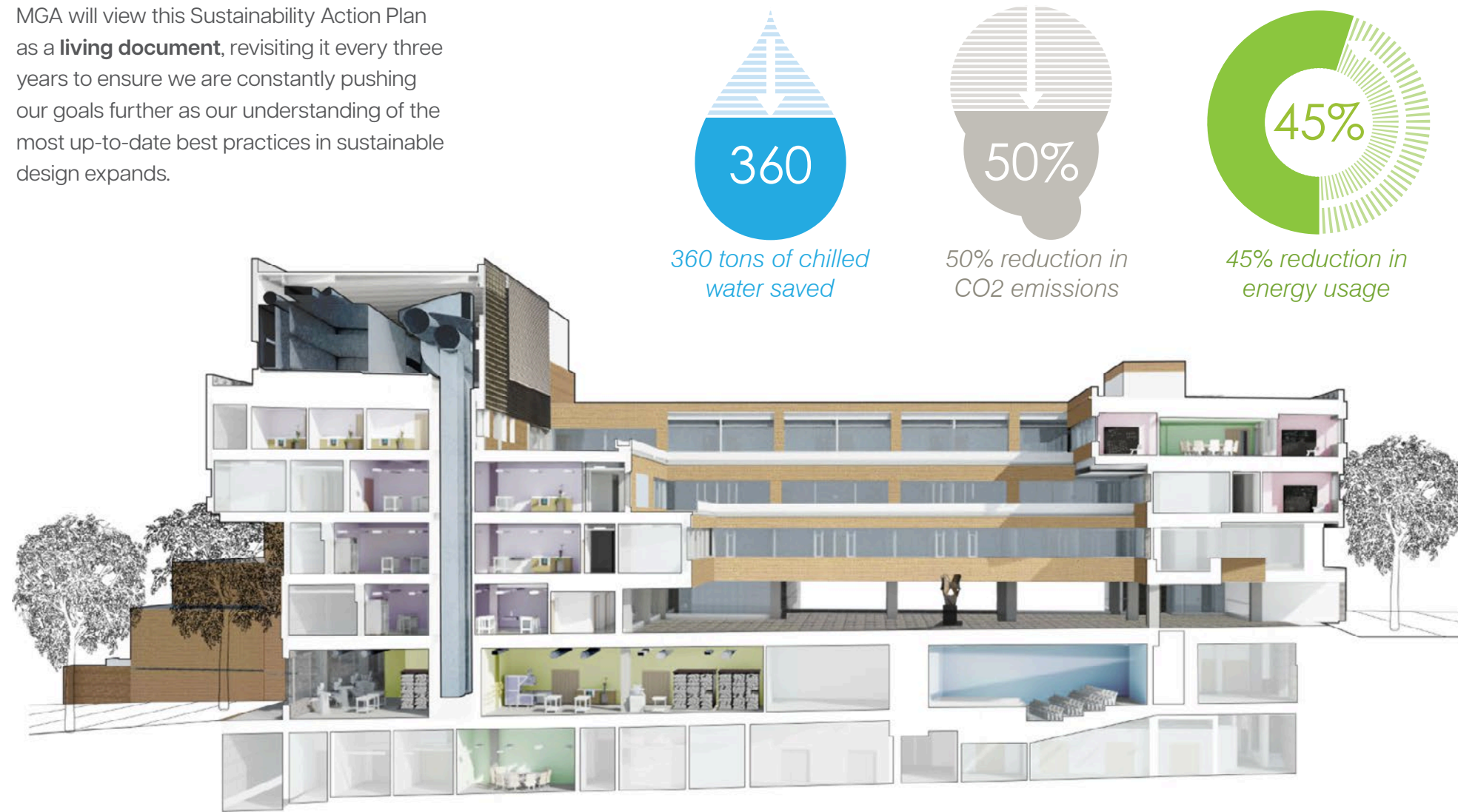
- Short-term (1-3 years): MGA will incorporate into our forthcoming Studio Manual a section focused on our principles of equitable practice and how we support professional development.
- Long-term (3+ years): We will revisit our approach to Equitable Practice every three years to ensure it continues to advance equity in evolving contexts.

Several of our staff are committed to mentoring young talent in architecture and design through programs that focus on underserved communities.



LOOKING AHEAD

MGA will view this Sustainability Action Plan as a **living document**, revisiting it every three years to ensure we are constantly pushing our goals further as our understanding of the most up-to-date best practices in sustainable design expands.



The comprehensive renovation of Jadwin Hall at Princeton University features envelope upgrades and new systems calculated to achieve a 45% reduction in energy consumption. New light systems support daylight harvesting and allow lumen levels to be tuned—while also giving the University the ability to engage in Load Shedding across campus.



