

Bohlin
Cywinski
Jackson

**Sustainability
Action Plan**



09.2024

Sustainability Action Plan

Overview

This 2024 Action Plan represents the latest evolution in BCJ's commitment to sustainability. Building upon our previous action plan and various commitments, we will use this document as a guide to bring more accountability, measurement, and collaboration to our practice.

Overall strategic goals are organized into categories by commitment; each category includes action items organized into a hierarchy of immediate impact and longer term objectives. There is deliberate overlap among the goals, reinforcing the integrated nature of our approach to sustainability.

The strategic goals categories include:

- Design & Process
- Knowledge
- Accountability
- Measurement
- Operations

We are excited to get started on our priority actions for immediate impact:

- Define a shared project process that incorporates sustainability discussions from the pursuit phase through post occupancy.
- Designate a sustainability champion for all projects, and identify practice-wide sustainability experts.
- Create forums for open, regular dialogue, and project team training.
- Develop an approach to reporting our progress internally and externally.
- Identify baseline performance goals for every project type.
- Develop a set of metrics that we will track, and identify the tools to track this data.
- Increase community engagement to foster greater awareness for reducing our impact on our planet.

We strive to design the world we hope for, and have focused on defining goals that inform a process to achieve this. This action plan is a living document, and will be evaluated and updated every five years. See you again in 2029!

1

Our Commitment to Sustainable Design



Our design process is rooted in the belief that exceptional architecture enhances the health and wellness of its occupants and surroundings, creating a pride of ownership that ultimately becomes the methodology for lasting sustainability.

Bohlin Cywinski Jackson is a design-focused practice with studios in Wilkes-Barre, Pittsburgh, Philadelphia, Seattle, and San Francisco. We approach each project as an opportunity to reduce energy and materials consumption, reduce embodied and operational carbon, promote occupant wellbeing, and design for a more just world, inspiring and empowering our partners to make regenerative choices. We are committed to the idea that **exceptional architecture and sustainable architecture are one and the same**, and that the role of the design team includes stewardship for future generations.

We bring to our work the lessons learned and technical understanding from over 60 LEED-certified projects (including nine Platinum certified) as well as four AIA COTE Top Ten awards, and multiple GREEN GOOD Design awards. Across a wide range of projects, we optimize passive and active design strategies in an integrated, holistic approach, using early energy modeling and lifecycle cost analysis to understand and validate the environmental, social, and economic impacts of design alternates.

We are a firm driven by curiosity and a desire to expand our notion of what is possible. We believe that empathy and active listening are vital tools in translating the aspirations of our clients into built environments that embody resilience and adapt to an ever-changing world. We approach all of our work through a holistic yet project-specific view toward longevity.

Pleasant Hill Library
Pleasant Hill, California
Designed to Net Zero Energy

Why are we doing this?

To be more intentional about how we are designing with and communicating about sustainability.

To be more mindful of our finite resources.

To be more informed in our decision making.

To become industry leaders in sustainable design.

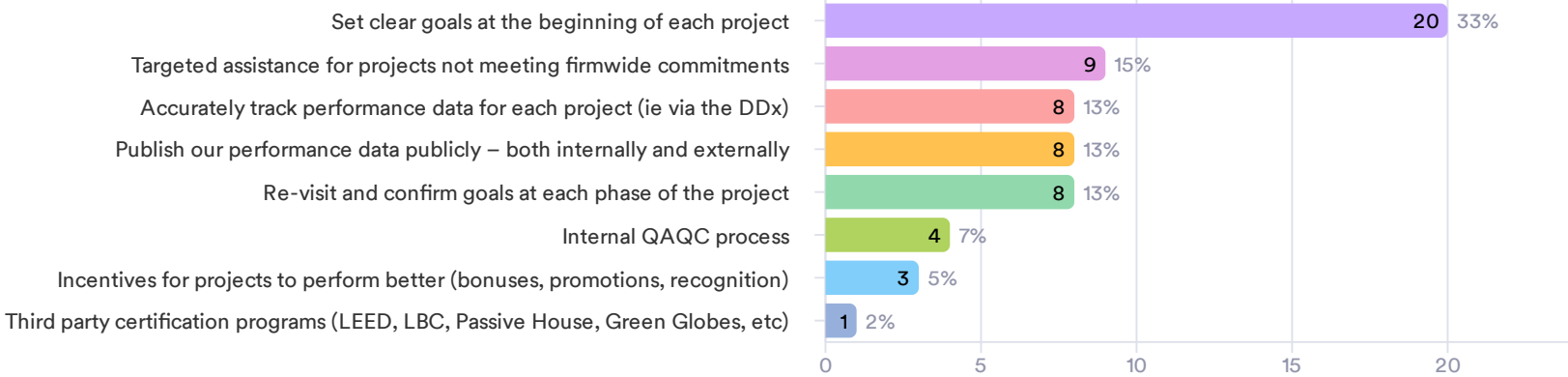
For the betterment of the built environment.

To become better designers and architects.

If we could do just one of the following to amplify sustainability at BCJ, what do you think would make the most impact on our practice?



What would you like to see reinforced most urgently?



2

Amplifying Sustainability: Defining our Goals



The goals outlined here are the foundation of our action plan and represent our collective desire to amplify sustainability at BCJ. Each goal is further described in the following sections of the action plan.

To arrive at these goals and the actions associated with them, we followed a rigorous process to incorporate feedback from all staff. The kickoff began with a smaller group of representatives from each studio, representing key market sectors, as well as marketing and communications, IT, project staff, and leadership. Across a multi-day charrette, this group identified challenges, priorities, and action items to comprise the plan. Building upon the insights from that initial charrette, a smaller team collated the information, and drafted a list of strategic goals and associated action items.

After affirming the draft goals with leadership, the team developed and circulated a firmwide survey, followed by a virtual firmwide discussion with interactive breakout groups to solicit additional feedback and respond to survey results. Input from the virtual meeting and survey was then layered over the draft goals and actions to inform priorities and missing elements. The result of this effort is the following document—we are excited to continue to strengthen and evolve our commitment to sustainability.

Agnes Irwin School
Bryn Mawr, Pennsylvania
Sustainability Charrette

Guiding Principles

Build upon our balanced approach of Intellect and Intuition by embedding our commitment to high performance in everything we do.

Implement a more intentional process that acknowledges our responsibility as stewards of the environment, regardless of project type, scale, location, or client.

Amplify our commitment and impact as leaders in sustainability by using our voices and platforms.

Define measurable goals and track those metrics across all of our work to hold ourselves, our project teams, and our clients accountable.

Enhance our internal culture of sustainable design by centralizing resources, sharing expertise, and building our collective knowledge base.

Look for opportunities to innovate on each project, moving from “sustainable” to “regenerative,” with careful attention to the circumstances of each project.

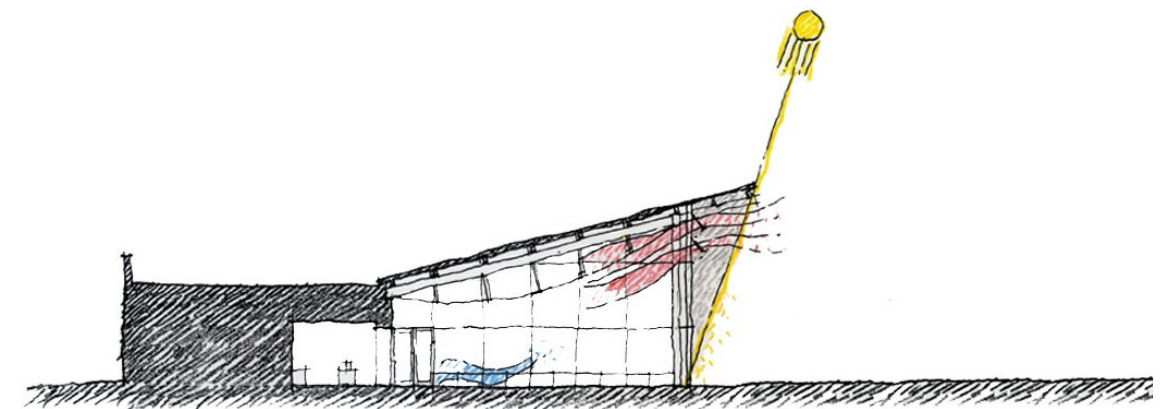
3

Design & Process: Defining an Intentional Approach to Sustainability



The key to achieving high performance for buildings has everything to do with the process that is used to get there. BCJ's design process has always included deep listening and careful consideration of site, program, client needs, and future adaptability.

We will build upon this legacy to codify and formalize the design process, making adjustments and additions as needed to lift all projects to higher performance, long life, and positive environmental impact.



Visitor Activity Center at the Pocono Environmental Education Center
Dingmans Ferry, Pennsylvania
AIA COTE Top Ten Award

Priorities

Immediate Impact

Define and document our design process.

In an effort to enable every BCJ project to meet its high performance goals, we will build a shared process that every project will follow. Project teams will be provided with a roadmap to include suggested tools to guide discussions about sustainability from the project pursuit phase through post occupancy. These tools are elaborated on in sections throughout this action plan.

Develop a strategy to support data-informed decisions.

The project process roadmap will provide teams with guidance on when to run analysis for targeted metrics, based on what baselines and performance goals the team has selected at the project outset. Refer to Part Five of this action plan for additional information about setting project performance goals. Refer to Part Six for additional information about measurement and analysis. As we develop a broader understanding of the impacts of design moves, we will improve on the feedback loop so that decisions are more consistently informed by data.

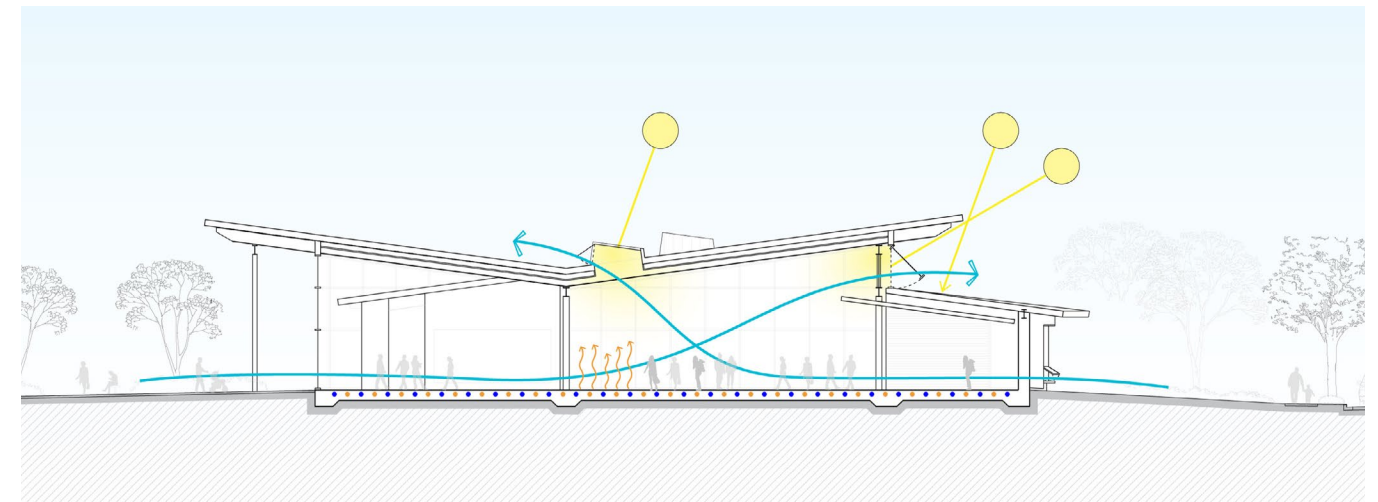
Designate a sustainability champion for all projects.

Each project team will have a dedicated sustainability champion assigned to carry the project sustainability goals forward. This person must be involved with day-to-day project work, and may serve as champion on multiple projects. They will be tasked with “carrying the torch” of sustainability throughout the design process and through construction as applicable. Where appropriate, the champion will continue beyond occupancy to support performance monitoring and post-occupancy evaluations. They will interface with the project team, marketing and communications, dedicated sustainability staff, and consultants to share information and ensure that data is collected, confirmed, reported, and shared as appropriate.

Development and Growth

Align our practice with like-minded partners.

BCJ has been fortunate to work with forward-thinking partners for the past few decades, building positive relationships with engineering and design consultants, and mission-led organizations. We encourage all staff to maintain their relationships with like-minded partners, and seek out opportunities to forge new ones. See Part Seven for more information about how BCJ intends to encourage all staff to engage in the communities we live in to foster greater awareness for reducing our impact on our planet.

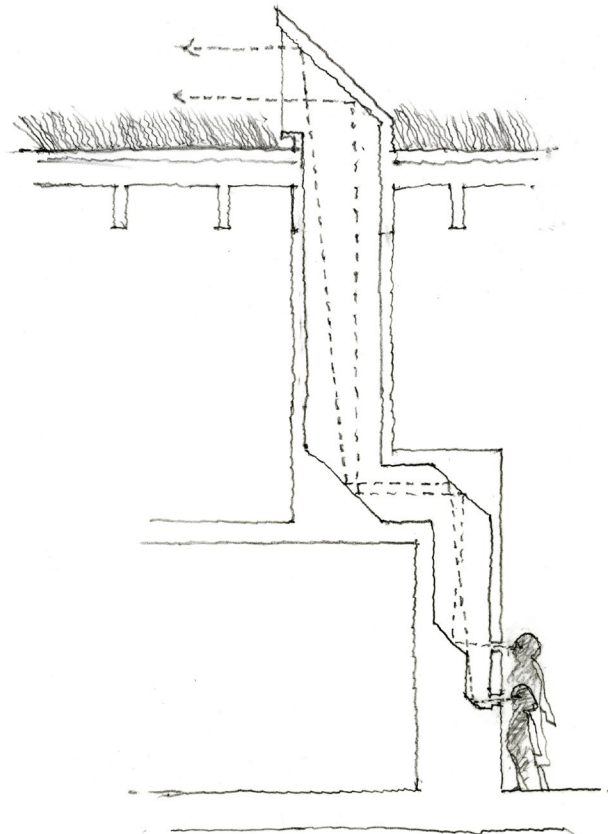


Pleasant Hill Library | Pleasant Hill, California | Designed to Net Zero Energy

A welcoming and flexible public destination, Pleasant Hill Library reflects the community's desire to spark imagination, fuel potential, and connect people with ideas and each other. An all-electric, highly energy-efficient design provides a healthy, responsive and resilient civic building that will serve the community for many years to come.

4

Knowledge: Building a Culture of Continuous Learning & Innovation



BCJ has two distinct assets that enable knowledge development and sharing: a diverse range of project types, scales, and market sectors in which we work, and our willingness to share our knowledge with each other. Our range of program types helps us to design for longevity and a variety of rich experiences within each building and structure, where the experience of designing a private residence can inform the design of an undergraduate residence hall, or an informal teaching space can inform the design of a workplace breakout room.

Our willingness to share our knowledge with our colleagues makes for rich discussions about lessons-learned, from aligning our sustainability goals with those of our clients, to understanding of material properties and performance through research and application. The following actions build a more robust and accessible firmwide shared knowledge infrastructure.

Ballard Library & Neighborhood Service Center
Seattle, Washington
AIA COTE Top Ten Award

Priorities

Immediate Impact

Define a process for training project teams.

Training must be consistent, and on-going. Most project team training centers around two categories: the first is software training to run analysis on design proposals, and the second is ongoing sessions addressing trends in sustainability, new tools, code and certification updates, etc. The first category will be addressed on the project level by having sustainability champions on each project team interface directly with fellow champions, dedicated BCJ sustainability staff, and MEP consultants to run analysis on their designs. Having the champion directly involved with analysis and data-gathering—rather than handing the task to an outside expert—allows more seamless feedback to the project, and more informed decision-making. The second category will be addressed with a firmwide sustainability expert series, where outside industry leaders are invited to give virtual sessions. These sessions will occur at minimum every quarter.

Identify practice-wide sustainability knowledge experts as in-house resources

After analyzing the approaches of several of our peer firms, we recognize our firm structure necessitates a unique approach, given its size and broad geographic distribution. We also recognize we need full-time dedicated sustainability staff, rather than architectural or administrative staff that may be pulled to other tasks and responsibilities. We will develop a new Sustainability Director position within the firm; this person will be dedicated full-time to advancing the actions within this plan and will support project teams firmwide. In addition, we will formally appoint two additional people to serve as half-time sustainability support; one will cover the west coast offices, and one will cover the Pennsylvania offices.

Create forums for open, regular dialogue to share project research, goals, and successes/failures.

BCJ will nurture two venues for more immediate discussions, questions, research, etc. One will be a consolidated Teams channel dedicated to project or firmwide sustainability issues, with links to resources on our firm intranet, Graymatter, as appropriate. The other venue will be a regular informal forum, via Teams meetings, for staff to discuss lessons-learned and present project successes and failures. Each meeting will be centered loosely around a topic and will include voices from all studios and project types.

Development and Growth

Develop a template to document each project's goals, performance, and unique stories.

This action item aligns with our Accountability and Design and Process actions, by streamlining data collection for design teams, and marketing and communications staff. Each project will maintain a living document modeled on the COTE super spreadsheet, which tracks the project's progress relative to the Framework for Design Excellence measures. Project teams will update the file at every milestone, and it will be accessible as a reference to communications staff and project staff outside of the core project team.

Develop a centralized location for shared resources.

BCJ's intranet, Graymatter, will serve as a repository of information updated annually, or as critical new information is released (i.e. certification and code updates, policy updates, adoption of new resources and tools). It will host links to attachments in various file formats, and references and links to industry-wide websites and other resources.

Enable staff to participate in continuing education opportunities, workshops, and conferences to build individual and practice-wide literacy.

BCJ will encourage staff to participate in additional learning opportunities via workshops, conference attendance, lunch and learn meetings both in person and virtual, and credential certification such as LEED, WELL, Fitwel, LBC Ambassador, Passive House, etc.

5

Accountability: Keeping Ourselves Accountable to Meeting Our Goals



We embrace transparency and both internal and external reporting to foster accountability. The following actions help strengthen a culture of accountability to advance our firmwide goals.

BCJ committed to reducing the energy consumption of structures in our portfolio when we became signatories to the AIA 2030 Commitment in 2015. This initiative, administered and managed by the AIA, asks firms to step down the energy use of their designs every few years with a goal of net zero emissions by the year 2030. BCJ has been reporting project data annually to the AIA Design Data Exchange (DDx) since 2016.

In 2023, we signed on to the AIA Architecture & Design Materials Pledge. This commitment seeks to “inspire a positive shift in materials specification” by turning attention to how construction material selection intersects with human health, social health and equity, ecosystem health, climate health, and a circular economy.

Following on these commitments, we will look to additional platforms that align with our values so that we may add our voices as leaders in sustainability. In the meantime, we will reinforce our commitment to these initiatives by continuing to report our progress both internally and externally.

Valdes STEM + Innovation Center
Greenhill School
First mass timber building in Greater Dallas area

Priorities

Immediate Impact

Identify baseline performance goals for every project type.

Identifying baseline performance goals early, ideally in the programming and concept phases, helps set projects up for success in execution. BCJ will establish a baseline “kit of parts” to assist in goal-setting; each part will be loosely organized around the Framework for Design Excellence, and will be adaptable by region. Project teams will be able to select goals aligned with their client needs, program, location, budget, and other constraints.

Develop an approach to reporting our progress internally and externally.

A critical part of consistent performance improvement is transparency. We commit not only to analyze the energy performance of each project, but to use that data to inform decisions in real time during design phases, and to share that data internally so project teams across the practice can learn from successes and challenges. This knowledge-sharing is a foundation of our culture of sustainability as described in the previous section, and serves as a tool for project teams to hold each other accountable for performance on every project. Data from the AIA DDX database will be shared internally firmwide every year, and will be published on BCJ’s website and social media platforms.

Development and Growth

Commit to expressing sustainability in our work.

We are often asked by our education clients to design for “sustainability on display” so the building can be used as an integral part of the learning experience. We also like to consider more broadly how our building designs can subtly influence and guide the thinking and behavior of inhabitants. This could be through connecting users to the outdoors and natural systems by enhancing biophilic aspects of materials and forms. It could also be by making mechanical systems more visible and apparent, highlighting on-site renewables, providing real-time energy use dashboards, or encouraging users to think about waste collection. We pledge to continue to think not only about how a building can influence its environment, but how expressive aspects of the design can influence and inspire building occupants.

Develop an approach to discussing sustainability on Day One with clients, project teams, and consultants.

Living our commitment to sustainable design starts with how and when we speak about it with clients, colleagues, and design partners. Sustainability will be integrated into initial project goal-setting conversations with clients, and will be discussed with consultants during the project pursuit phase. Consultant agreements will be further strengthened during contract negotiations to address sustainability goals. Additional services such as consultant-led energy modeling and LCA will be included when project budget and square footage thresholds are met. To align our sustainability goals with those of our clients, BCJ will develop a set of talking points to use with different client groups, and collect data visualization samples, graphics, and other visuals for project team use.

Use a common framework for documenting goals and commitments.

BCJ will develop a set of resources to serve as a common framework for use during design, construction, and post occupancy reporting and tracking for marketing and promotional materials. We will draw from industry standard resources from the AIA, evaluate their usefulness to project teams, and adjust their use to suit our firmwide and project specific needs. These common framework documents will reinforce our commitments to transparency and accountability by allowing us to elevate project performance and more easily publish project metrics internally and externally.

Commit to the use of healthy materials by using the Red List and EPD's for all projects.

Our commitment to the AIA Architecture & Design Materials Pledge has the opportunity to propel our firm toward more careful consideration of how we select construction materials. Since its inception, BCJ has maintained a high level of attention to craft and detailing of materials, with strong consideration to durability, maintenance, cost, and aesthetics. Going forward, we will continue our high level of attention to material selection with additional consideration to environmental and human health. Our goal is for project teams to evaluate materials for the chemicals listed in the current LBC Red List and will prioritize the use of materials that have HPD's, EPD's and/or Declare labels.

Develop a Post Occupancy Survey for use on all projects.

Post occupancy data is incredibly useful in helping us evaluate design performance and determine what kinds of lessons to draw from our built projects once inhabited, promoting continuous improvement in our process and work. Frequently, the predicted performance in the design phase does not match the actual performance; post occupancy data can help us understand why. BCJ will develop a set of questions to help us collect information about lighting performance, comfort, maintenance, energy and water use, and other categories. The data will be shared firmwide as lessons learned, and can also be used to assist our clients in troubleshooting issues. This effort demonstrates and reinforces our commitment to follow-through. It helps us learn and achieve ever better results for future projects.



Heartwood Annex | Waldorf School of Pittsburgh

To showcase (and teach) sustainable building practices and promote healthy learning environments, the classroom is pursuing Core Green Building Certification with the International Living Future Institute.

6

Measurement: Commitment to Informed Design through Data

The following actions will clarify how we collect data to evaluate our design decisions so we can ensure the greatest positive impact.

Focusing on consistent metrics to track firmwide will help us address the challenges of the 2030 Commitment; look ahead to new commitments; and increase the proficiency of all staff in reading and interpreting data, and using this analysis in design decisions.



Valdes STEM + Innovation Center
Greenhill School
Daylight Analysis

Priorities

Immediate Impact

Develop a set of metrics that we will track, and identify the tools to track this data.

Acknowledging our long term commitment to the 2030 Challenge, we will ensure that every project has an accurate predicted Energy Use Intensity (pEUI) drawn from a project-specific model. We will also ensure that every project incorporates a project-specific pledge aligning with the AIA materials pledge. These two metrics of energy use and material selection will form the foundation of our project metrics portfolio-wide, but all teams will be encouraged to layer on additional measurement tools to evaluate sustainability on their projects.

Metrics that are analyzed could include Whole Building Life Cycle Analysis, daylight autonomy and glare analysis, a material red list, indoor air quality, water use, views, etc. Additionally, all projects will use appropriate Life Cycle Analysis tools to evaluate the impact of the material selections at the conclusion of the design phases, so that the data can be collected for 2030 reporting.

All projects that are enclosed, are 5,000 square feet or greater, and contain mechanical heating and/or cooling will be required to track design energy performance as part of the Schematic Design deliverable, using Autodesk Insight. For projects that have an MEP engineering team or Sustainable Design consultant capable of running energy models, design teams are encouraged to have their project engineer update the energy model at each phase of design. Project Managers shall review the energy modeling and reporting requirements in our standard AIA C401 Architect – Consultant Agreement template with our MEP engineering consultants to reinforce our desire to use energy modeling to optimize our work, enable informed decision-making, and document our progress.

Projects that do not have an MEP engineer, or do not have a consultant capable of energy modeling, may run periodic analyses using Autodesk Insight in-house. Projects that are not enclosed (i.e. pavilions) or that are interiors-only are encouraged to measure lighting power density and plug loads. See Part Five of this Action Plan for more information about our approaches to transparency and publishing the data.

Development and Growth

Create a workflow that allows for easy data discovery and reporting.

This action item layers into the project process roadmap, described in Part Three of this action plan. While the specific nature of each project will dictate how and how often the data is collected, each project is encouraged to follow the roadmap to establish and test design assumptions. Project staff are encouraged to feed their curiosity by grappling with the data outputs and using the information to make informed design decisions.

Link project data to digital platforms for sharing both within the project team and across the practice.

BCJ will leverage internal digital tools to both track and share project information. This sharing mechanism will be developed in tandem with the tools and templates described in Parts Three, Four and Five of this Action Plan.

Beyond building performance, consider how we can measure the impact of our work on those who use our projects—health, wellbeing, equity.

Project teams are encouraged to maintain relationships with clients after projects are completed, and collect information about actual energy use, occupant well-being and satisfaction, and other post-occupancy evaluations. As appropriate, and when available, project teams shall participate in academic and other research projects with building owners and users, and share data and information internally.

7

Operations: Living Our Values Each Day



How can we design spaces for others to live these values without living them ourselves?

The following actions further develop our culture of sustainability in our operations and company policies toward employees.

The initiatives noted here began as discussions in 2019, as we sought to learn from the AIA Guides for Equitable Practice. These discussions evolved through our work with Team Dynamics and ultimately into our commitment to equity and transparency through the International Living Future Institute's Just. label.



Just.

Malachowsky Hall
University of Florida
Targeting LEED Platinum

Priorities

Immediate Impact

Increase community engagement to foster greater awareness for reducing our impact on our planet.

BCJ employees across all studios have made commitments over the years to engage with local communities and environmental organizations. BCJ provides paid time off to every employee to participate in volunteer activities. BCJ commits to encouraging employees to engage in local initiatives and lend their support to environmental groups that align with our values as described in this action plan.

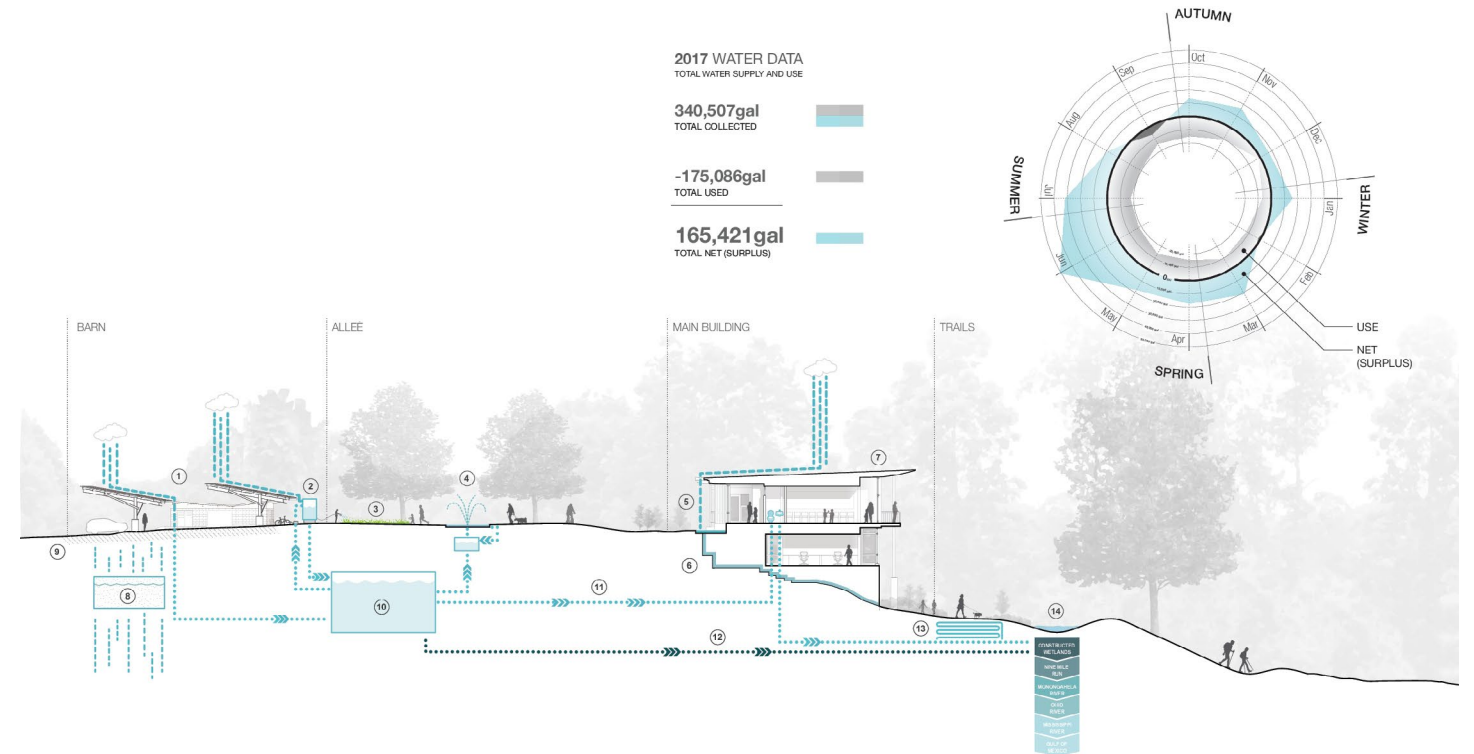
Development and Growth

Develop a plan to reduce our carbon footprint.

As signatories to the AIA 2030 Commitment, we have pledged to decrease the carbon footprint of the structures we design. Our next step is to decrease the carbon footprint of the spaces we inhabit, in the operational carbon of our studio spaces, the transportation we use to travel to the office and to project sites, and the carbon associated with purchases. We will start by collecting data about office operations, then evaluate ways to reduce waste and environmental impact. From this research, we will develop performance goals and track and share progress annually.

Create an annual 'studio challenge' to drive performance and change.

One of the advantages of our organization is our geographic spread across three states and five office locations. Each office has its own unique character and strengths. We can take greater advantage of this circumstance by initiating studio challenges to share, compare, and improve on environmental performance indicators.



Frick Environmental Center | Pittsburgh, Pennsylvania | LEED Platinum + Living Building Challenge + AIA COTE Top Ten Award
The first free and public building to receive Living Building certification, the Frick Environmental Center merges building, landscape, and a palpable sense of civic and environmental advocacy. The net positive, LEED Platinum building is a living classroom for environmental education, providing hands-on opportunities to experience nature and learn about sustainable design.

8

Appendix Resources and Additional Information



The following initiatives helped inform the creation of our 2024 Sustainability Action Plan.

BCJ Sustainable Action Plan 2015 – 2016

The first iteration of our firmwide Sustainability Action Plan, developed in 2015-2016 upon signing on to the AIA 2030 Challenge Commitment.

March 2023 Kickoff Charrette

This charrette launched the firmwide effort to re-develop our action plan. It was convened virtually with 12 members of the firm, representing a geographic, role-related cross-section of the practice.

October 2023 Firmwide Survey

This Jotform survey was released to the entire firm and was designed to gather feedback to establish baseline knowledge and interests, and common goals for the future.

December 2023 Firmwide Sustainability Action Plan Charrette

The Sustainability Action Plan Charrette was convened virtually to include all studios in a discussion about sustainability at BCJ. The two hour charrette helped to establish goals and objectives and brainstorm new ideas for initiatives at BCJ.

BCJ Just. label

Just. is a “nutrition label” for socially just and equitable organizations. A voluntary disclosure tool, it offers a transparent platform for our practice to share a range of organizational and employee-related indicators, and signals our commitment to social justice and equity.

<https://www.bcj.com/news/why-we-are-a-just-organization/>

<https://just.living-future.org/s/organizations/20-organizations/bohlin-cywinski-jackson>

https://drive.google.com/drive/folders/12Z7bVyiAGtL8gtgNrTrSZGvVTtg_8Cw_

Bohlin Cywinski Jackson

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Architecture Planning Interior Design

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