



SUSTAINABILITY ACTION PLAN

AIA 2030 Commitment | Updated July 20th, 2023



Integrated Design + Sustainable Practice

Just like design services, sustainability should be approachable and accessible. At Board & Vellum, sustainable practice is deeply embedded in the work of our integrated teams of architects, interior designers, and landscape architects.

Based in Seattle, Board & Vellum is a multidisciplinary design firm practicing architecture, interior design, and landscape architecture for custom residential, multifamily, mixed-use, commercial, and civic projects. Our process is collaborative, informative, and adaptable – and sustainability is integrated into everything we do.

We believe you cannot have a sustainable project without great design, and that great design incorporates sustainable choices. Since a large portion of a building's carbon footprint is from its construction, the most sustainable building is one that is loved and will be around for people to enjoy for many years to come.

Creating great sustainable projects demands a balancing act of creativity and technology. The ability to optimize a project's design, environmental impact, and energy efficiency requires fluidity between the more creative processes and the strictly-defined metrics. Having a multidisciplinary, in-house team means we can view a challenge from different angles at any point, leading to creative solutions reflective of our clients' diverse goals.

Pressure is rising to move the needle faster due to an increased understanding of how the building industry impacts climate change. We seek to make resilient solutions more approachable, removing the noise so the wide array of options and strategies for incorporating green practices are better understood and more widely applied.

It is deeply important to us to lead by example. There is no one-size-fits all solution, but as creative professionals, we are all empowered to seek evolving, iterative solutions to tackle this urgent, complex problem. Together we can advocate and collaborate for the essential progress needed to alter our collective path.

Sustainability Manifesto

We view sustainable practice as imperative action supporting our communities and neighborhoods, and fostering a future where we can all thrive. Our efforts are guided by the principles in our Sustainability Manifesto.

Design projects holistically, with an integrated design approach.

As an integrated design firm with architecture, interior design, and landscape architecture in-house, our multidisciplinary collaboration through each phase provides deeply-explored design solutions and delivers beautiful and beneficial projects.

Use resources responsibly and substantially reduce our carbon impact.

We take responsibility for the impact our work has on the environment. We understand our planet's resources are finite and must be managed responsibly. Considering the built environment's contribution to climate change, we are working toward reducing both the carbon impact of our projects and reducing our collective waste.

Value health and wellbeing as vital to the spaces we design and inhabit.

Our work has a profound effect on our bodies and our wellbeing. By designing spaces with healthy materials, access to natural light, and good air quality, we are creating spaces safe for us and our fellow community members to inhabit.

Ensure our team, collaborators, and clients achieve and maintain sustainability literacy.

We foster a culture of learning and sharing with others. We create opportunities for our team to access the tools they need to become proficient and confident leaders in the community and model a practice of continual learning in our network of clients, collaborators, and community at large.

Keep equity and inclusion at the center of our thought process.

Sustainability and equity go hand-in-hand. We know the impact climate change has on our most vulnerable community members, and are committed to balancing the present and future needs of these communities.

Intersect client care with approachable, tailored, sustainable strategies.

We understand each client and project is unique. We work with clients to pair appropriate sustainable strategies with their values to ensure aligned solutions balancing the needs of the client, the project, and the local and global good.

Care for ourselves and our team the way we care for the planet.

We work toward our sustainability goals as a collective whole. We share the burden and the rewards of meeting our targets, and support our team members' wellbeing in the face of climate uncertainty.





Executive Summary

The impact buildings have on the environment is profound. The energy required to operate and construct buildings accounts for 40% of the world's carbon emissions. That doesn't even include carbon emissions from the manufacture of building materials.

Board & Vellum is proud to have joined the American Institute of Architects' 2030 Commitment. We are in good company, with over 1200 firms worldwide (as of June 2023) of all sizes and scales with a collective vision of creating a carbon neutral built environment by the year 2030.

As an AIA 2030 Commitment signatory, we are excited to continue the mission of our Sustainable Design Manifesto and help advance innovative design practices and methods for reducing environmental impacts. The following six points will guide our Sustainability Action Plan efforts.

1. Design Process

Apply integrative and collaborative principles through all phases of design to constantly refine our process and expand our positive environmental impacts.

2. Data Collection & Reporting

Normalize the collection and evaluation of building performance data. Report and discuss results frequently to improve future outcomes.

3. Internal Training & Education

Curate training opportunities that enhance ecological literacy and empower our team to advance environmental performance across all project types.

4. Sustainable Operations

Develop a targeted plan for reducing the firm's environmental footprint, assessing building-use and practice-related impacts.

5. Business Strategy

Develop a strategy to support the firm's sustainable design and operational goals with actionable policy, to help us grow into a leader of sustainable practice.

6. Outreach & Advocacy

Utilize speaking engagements, advisory board participation, editorial content, and networking opportunities to motivate action and advance environmental policy.



1. Design Process

Apply integrative and collaborative principles through all phases of design to constantly refine our process and expand our positive environmental impacts.

Envision

Set the direction before design begins:

- Identify sustainability champion on the project team.
- Assess client goals and values with respect to resources (energy, carbon, and materials), health and wellbeing, and social equity.
- Understand value and interest in sustainable programs.
- Hold sustainability charrette to kick-off a project.
- Bring in a fully integrated team at the beginning of a project.
- Run initial phase energy, carbon, and climate analysis.

Advocate

Shift the paradigm:

- Prioritize both big impact items and low-hanging fruit.
- Work to remove systemic roadblocks, such as advocating for manufacturers to remove red list materials from their products, or working with lawmakers to change policies.
- Ensure sustainability goals for projects are carried out through construction.

Analyze

Collect data at each project stage:

- Run energy and carbon modeling analysis.
- Run water use analysis.
- Upload data to the DDx.

2. Data Collection & Reporting

Normalize the collection and evaluation of building performance data. Report and discuss results frequently to improve future outcomes.

AIA 2030 DDx

The AIA 2030 Commitment, which Board & Vellum signed in January 2023, is a collective of firms striving to hit the 2030 Challenge goals while sharing their findings with the greater community. The 2030 Challenge calls for all new buildings to be carbon neutral, and all existing buildings to have a 70% energy reduction by 2030. Once a year, we report to the DDx database, where we record and track energy and carbon data from past and current projects.

Operational and Embodied Carbon

We use various tools throughout the design process to track our Energy Use Intensity (EUI) and Global Working Potential (GWP) in our projects. Subject to change, we use EPIC, Kaleidoscope, and ZeroGuide for early-stage modeling; Cove.tool and Tally for mid-stage modeling; and EC3, or outside consultants for late-stage modeling.

Water Use

We can track indoor and outdoor water use per project with Cove.tool using Gallons per Minute (GPM) or Gallons per Flush (GPF) metrics.

Post-Occupancy

We can learn a lot by studying our own projects after completion. When possible, conducting post-occupancy evaluations and checking real-world operations data after one year of occupancy can help us improve future projects.





3. Internal Training & Education

Curate training opportunities that enhance ecological literacy and empower our team to advance environmental performance across all project types.

Board & Vellum will ensure that appropriate energy and carbon reduction training is available to all technical staff to meet our design goals.

Specialty areas of training may include carbon sequestration, net positive energy, net positive water, regenerative site design, climate resiliency, healthy material specification, and occupant health. Ancillary classes will be made available

for non-technical staff to support business development efforts.

All team members are encouraged to attend courses or conferences with a focus on one or more of the specialty areas noted above, and report back to share their knowledge with the full team.

75% of technical staff will be trained to perform in-house energy, carbon, and

cost analysis, as well as how to confidently present findings to clients.

All staff are supported to earn LEED AP, LFA, WELL, or CPHC accreditations with a goal that 75% of the architecture, interior design, and landscape architecture team members will be accredited in one or more of these by 2030.

All staff are invited to participate in regular, in-house sustainability round table sessions held to share information and emerging technologies. These sessions are led at times by key team members, and at others by visiting specialists, depending on the topic and course level.



4. Sustainable Operations

Develop a targeted plan for reducing the firm's environmental footprint, assessing building-use and practice-related impacts.

We take our operations very seriously at Board & Vellum. We currently provide each team member with a paid ORCA card and ride share accounts to reduce the carbon impacts of commuting to our urban location, as well as in-office bike storage and shower facilities.

We were also early adopters of water-saving fixtures and recycling/composting efforts. And, we continue to refine our sourcing to prioritize supporting local, and small minority and women-owned businesses, reduced packaging, and other factors to assure vendors are a match with our company values.

We will continue pushing towards more equitable and sustainable operations:

- Conduct an energy audit of our office space and create an action plan for reducing energy use.

- Create a plan for offsetting office-related energy use. Investigate carbon offsets for business-related air travel from established and vetted third-party providers.
- Audit and disclose current Diversity, Equity, and Inclusion (DEI) efforts through JUST.
- Conduct a waste audit and create an action plan for reducing printing and consumption-related waste.
- Enhance signage and bin sizes at common waste stations to support better trash, recycling, and compost separation.
- Explore purchasing our own office building to remodel to achieve net zero carbon operations.

5. Business Strategy

Develop a strategy to support the firm's sustainable design and operational goals with actionable policy, to help us grow into a leader of sustainable practice.

Creating a sustainable path for the future means not only ensuring our projects are more sustainable, but that we set an example as a firm for how to model a successful practice.

Our efforts are categorized into three areas of general focus:

- internal efforts to elevate our sustainable efforts as a firm,
- a deep dive into how we can better communicate with our clients and collaborators to encourage sustainable project development,
- and efforts with the larger community to help enact meaningful change in our region.

Sustainable strategies can be perceived as contributing to higher costs when compared to conventional approaches. We aim to demystify the bottom line – both for projects and business practices – and make the business case for how sustainable design adds value, in both dollars and environmental impact.

Along with supporting our existing client base, we will position ourselves to attract clients and consultants (as well as new

team members as our company grows) who are committed to the goal of carbon neutrality, conservation of resources, and the reuse of existing buildings, materials, and resources.

We are committed to leveraging the resources of the firm to advance our sustainable mission. Some of our specific areas of focus are:

- to receive a JUST label, and then work towards becoming a B-Corp,
- to commit to the 2030 Challenge, and sign the AIA Materials Pledge,
- to continue the Living Shelter podcast, and increase our online educational resources,
- and to encourage leadership and staff participation in organizations such as: the AIA Committee on the Environment, Cascadia Green Building Council, Northwest EcoBuilding Guild, Carbon Leadership Forum, NOMA, and the Seattle Climate Partnership.





6. Outreach & Advocacy

Utilize speaking engagements, advisory board participation, editorial content, and networking opportunities to motivate action and advance environmental policy.

We recognize that the largest drivers of change toward a more sustainable built environment are raising public awareness, and updating codes, rules, and other public policy. As it is said, a rising tide lifts all boats.

We commit to increasing our engagement efforts, using our collective voice in discussion forums, supporting appropriate congressional bills, and continuing to shine a light on solution-based ideas for positive action.

Conferences & Speaking Engagements

Designate and empower key employees to speak, present, or participate in technical panels at conferences each year.

Share Resources via Web Content

Create robust web content with educational resources and sustainability-related blog posts.

Build Engagement via Podcast

Produce and host a sustainability-focused podcast and develop a robust listenership through social and podcast platforms.

Engage Manufacturers & Lawmakers

Reach out to manufacturers with requests for red-list-free products, and to our representatives in support of forward-thinking legislation.

Leverage Shared Tools

Utilize the International Living Future Institute's Policy Leadership Toolkit and advocacy tools.

Promote Established Initiatives

Support and cross-share initiatives from Shift Zero, USGBC, and other NGOs focused on moving policy towards net-positive energy, carbon, and water in development.



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