MITHŪN

Sustainability Action Plan

AIA 2030 Commitment

Executive Summary

The American Institute of Architects has enacted an initiative called The 2030 Commitment, with a goal of making all buildings carbon neutral by the year 2030. Mithun has joined 155 firms (as of 3.1.11) in adopting this challenge to reduce energy consumption in the built environment.

By adopting the 2030 Commitment, we will help to reshape the professional practice of architecture and encourage our clients and industry partners to join us in creating a more sustainable future.

1. **SUSTAINABLE DESIGN GOALS**
   Identify quantifiable design goals for every project regardless of whether they are required by the client.

2. **STAFF TRAINING & EDUCATION**
   Provide education and training to ensure that staff remain at the cutting edge of innovation and technology—and that this translates to 2030-compliant projects.

3. **DESIGN PROCESS**
   Promote a design culture and process that is multidisciplinary, collaborative, goal-oriented, and metric-driven.

4. **SUSTAINABLE OPERATIONS**
   Develop a sustainable operations plan aimed at reducing the negative impact of firm operations related to energy use.

5. **BUSINESS STRATEGY**
   Develop a business strategy that communicates the importance of a sustainable design approach and the firm's qualifications as a leader in high-performance design.

6. **REPORTING & ACCOUNTABILITY**
   Strengthen the firm's commitment to meeting 2030 goals, and communicate areas of achievement and opportunities for growth.

7. **ADVOCACY & PUBLIC POLICY**
   Leverage Mithun's public speaking opportunities, involvement in conferences, participation in advisory boards, and relationships with academic institutions to educate the public and motivate action to fight climate change.

1. Sustainable Design Goals

Identify quantifiable design goals for every project regardless of whether they are required by the client.

A. TRACK:
To reduce greenhouse gas (GHG) emissions in all Mithun projects with conditioned spaces, project teams will track the following metrics:

1. Energy Use Intensity (EUI)
    - » In KBTU/sf/year for conditioned spaces only
    - » In kBTU/sf/year for all spaces
2. Greenhouse Gas (GHG) Emitted in CO2 equivalents (CO2E) for the entire project over one calendar year
    - » The CO2E Emitted shall track only Scope 1, direct emissions related only to the building's operations. GHG emissions from business or occupant activities unrelated to the building's functioning are excluded.
3. Percent below Model Energy Code Baseline, ASHRAE 90.1-2007
    - » Mithun will re-evaluate the reference baseline when ASHRAE 90.1 – 2007 is superseded by a more stringent code.
4. Target Finder Score
    - » In mixed-use projects, multiple baselines per occupancy will be used

B. REPORT:
In compliance with the 2030 Commitment, Mithun will report the following to the American Institute of Architects (AIA):

1. Firm % PEUI (Projected Energy Use Intensity) reduction from Average EUI
2. % GSF of Active Projects meeting current goal
3. GSF of Active Projects
4. % of GSF modeled
5. LPD (Lighting Power Density) Reduction from ASHRAE 90.1-2007

C. UPDATE:
Complete or update LEED® or Living Building Challenge (LBC) checklists at the conclusion of each phase, regardless of whether a project is seeking third party certification.

Annually Report the following:

1. The total number of the firm's projects (registered and unregistered) and the percentage breakdown of those projects that are on track for meeting the requirements for LBC, LEED® Platinum, LEED® Gold, LEED® Silver, and LEED® Certified.
2. The total number of projects formally registered with either the International Living Building Institute (ILBI) or the U.S. Green Building Council (USGBC), plus the breakdown of those projects on track for meeting the requirements for LBC, LEED® Platinum, LEED® Gold, LEED® Silver, and LEED® Certified.
3. The cumulative total number of completed Mithun projects that have achieved final certification for LBC, LEED® Platinum, LEED® Gold, LEED® Silver, and LEED® Certified.

D. COMMIT:
Conduct Post-Occupancy Energy Studies for all projects with conditioned spaces. At the close of the first year—and at three year anniversaries following the date of final completion—project teams will interview previous owners to determine:

1. *The amount of total energy consumed* by the building over a 12 month period. If permitted, the team will collect 12 months of energy and water bills and consumption data.
2. *Occupant behavior* related to energy usage, thermal comfort, and real-world plug loads by interviewing the Facility Manager (or equivalent.)
3. *Performance and ease of operation* related to mechanical, electrical systems by interviewing the Facility Manager (or equivalent.)

Mithun's 2030 Commitment Team will integrate lessons learned from these POEs into Mithun's continuing education (Mithuniversity) class offerings.

2. Staff Training & Education

Provide education and training to ensure that staff remain at the cutting edge of innovation and technology—and that this translates to 2030-compliant projects.

Mithun's 2030 Commitment Team will ensure that required energy and GHG issue training is available to all technical staff through in-house continuing education programs such as Mithuniversity. Optional classes will be held for other disciplines and non-technical staff. Related requirements include:

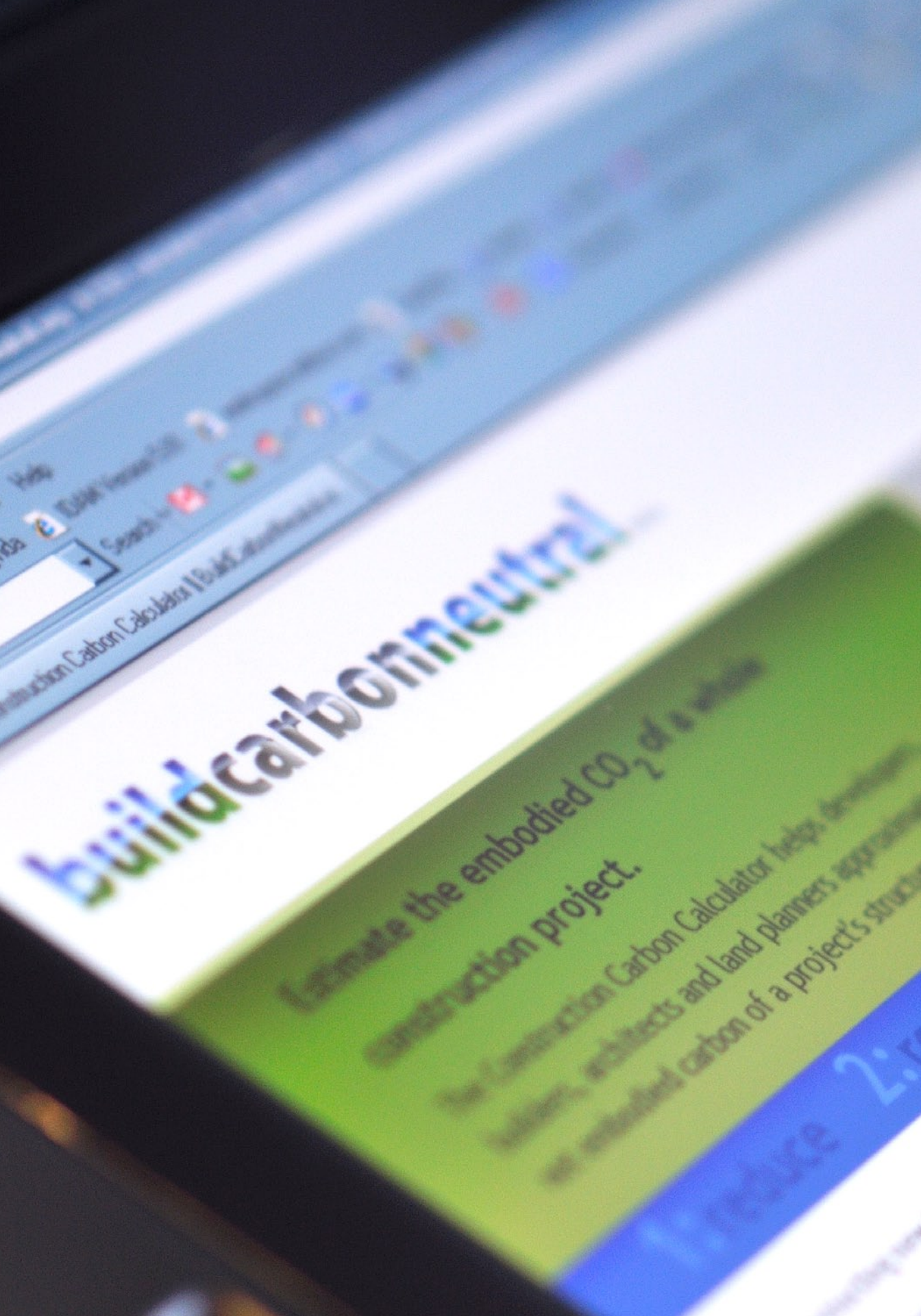
» All technical staff are required to earn LEED® AP certification (includes architects, landscape architects, planners, and biologists) as a condition of employment.

» The 2030 Commitment Team will designate and empower key employees to present at conferences, participate on technical panels and report back to Mithun in continuing education classes.

» Specialty areas may include: GHG policy and reporting; clean and emerging technologies; land use impacts on GHG; carbon sequestration; energy efficient design, etc.

» The 2030 Commitment Team will hold regular, voluntary, sustainability brown bag roundtables where specialty area leads can share new information and technologies with attendees.

Visiting experts and guests will be invited to join roundtables to increase technical knowledge and cross-pollination of expertise.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3. Design Process

Promote a design culture and process that is multidisciplinary, collaborative, goal-oriented, and metric-driven.

At the start of each new phase for all projects, the team will hold a meeting involving all disciplines to discuss the project's opportunities and schedule for meeting the goals of the 2030 Commitment. The resulting design approach for each project will include:

» **A payback analysis** of key building systems. (For example, *Windows: Comparison of energy use for building with wood windows versus fiberglass windows.*)

» **A set of metrics** for sustainable design goals at the outset of the project; qualifying green building rating systems include LEED®, LBC, or the Sustainable Sites Initiative (SITES.)

» On selected projects where fee allows, the team will complete a **detailed life-cycle cost analysis (LCCA)** of system options that account for synergies and trade-offs between building systems. (For example, *Windows: Complete a detailed analysis of energy use considering window shading, type of window, exposure, heat gain, opacity, etc.*) All projects will follow Washington State's LCCA guidelines.

4. Sustainable Operations

Develop a sustainable operations plan aimed at reducing the negative impact of firm operations related to energy use.

Office Facility Energy Use:

- Buy 100% green power for office-related energy use
- Employ natural cooling only for occupied office spaces (no air conditioning), through use of operable windows
- Utilize flat screen monitors and energy-efficient light fixtures for critical task work areas and general office illumination
- Conduct energy analysis of existing building and mechanical systems and create an action plan to reduce overall energy demand

Project-Related Energy Use:

- Offset GHG emissions of all private car, taxi, rental car, and air travel associated with project activities
- Submit a "carbon budget" for the business travel for each project, and track actual project GHG emissions per project
- Use results to identify strategies to reduce future GHG emissions related to projects
- Reduce air travel by use of WebEx and video conferencing

Individual Energy Use Related to Work at Mithun:

- Provide and maintain bicycles for staff errands and project meetings
- Provide shower and changing rooms to encourage bicycle and pedestrian commuting options and increase staff health and wellbeing through exercise
- Partially subsidize public transit passes
- Develop incentives for reducing single occupant travel for commuting

5. Business Strategy

Develop a business strategy that communicates the importance of a sustainable design approach and the firm's qualifications as a leader in high-performance design.

Mithun's 2030 Commitment Team will lead the effort to create a resource database that supports the value of the firm's sustainable design services, including information on project costs, operating costs, and occupant satisfaction and productivity.

Using this information, the firm will develop marketing materials that highlight the sustainable design aspects of the firm, including design philosophy, a list of LEED® Accredited staff, and a list of projects that meet LEED®, Living Building Challenge, SITES, etc.

Clients, consultants and employees will have access to this information, as well as Mithun's plan for sustainable actions and operations, through the website and print collateral, such as this booklet. In the future, employees will also be able to link to the project document log through the Intranet to enter project data directly into the forms created by the 2030 Commitment Team.

The 2030 Commitment Team will document and track the percentage of the firm's work related to renovation, and develop marketing materials featuring the firm's capabilities in renovation services. Using past projects as a guide, the firm's leadership will determine strategic targets for growth in renovation work that align with 2030 goals.

6. Reporting & Accountability

Strengthen the firm's commitment to meeting 2030 goals, and communicate areas of achievement and opportunities for growth.

The 2030 Commitment Team will provide the AIA with the firm's sustainability action plan and commit to supplementing the plan with annual progress reports. All of these documents will be available online at Mithun's website.

As a part of the yearly "State of the Firm" report from the CEO, Mithun will publicize its resource consumption of water, energy and carbon and compare to targets. As a future goal, the 2030 Commitment Team will implement Intranet reporting (eventually live-time) of Mithun's operational energy use.

7. Advocacy, Policy & Public Education

Leverage Mithun's public speaking opportunities, involvement in conferences, participation in advisory boards, and relationships with academic institutions to educate the public and motivate action to fight climate change.

The 2030 Commitment Team will identify two or more public speaking engagements annually that can be leveraged as a strategic platform for discussing the impact of fossil fuel-dependent energy generation. They will also provide strategic advice on the continuation and expansion of partnerships with NGO's and academic institutions with whom Mithun has opportunities to develop new design tools for carbon reduction.

Staff of all levels will be encouraged to serve on local, regional, state and national advisory boards committed to reduction of greenhouse gases—and to implement technical, financial and regulatory solutions in their work. Those individuals will be encouraged to participate in brown bag events to share updates, news, and trends with fellow staff.

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