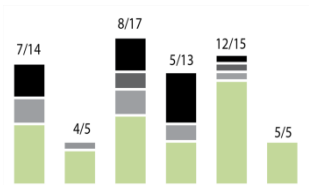


## Executive Summary



In June of 2009, KlingStubbins senior management signed the AIA 2030 Commitment, to develop an action plan to advance the goal of Carbon Neutral buildings by the year 2030. As a member of the AIA Large Firm Roundtable, we believe our actions and commitment can contribute to changing the industry. This document highlights the changes we have made and commit to making to meet this challenge, and to set an example for other firms to follow in high-performance design work.

The action plan includes five distinct strategies that address our approach to incorporating sustainability into all aspects of our practice.



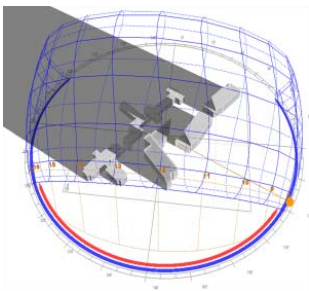
### Develop Sustainable Design Goals

Incorporate into project process a goal-setting for each project, whether or not it is pursuing LEED or other sustainable rating system compliance. **Currently approximately 45% of projects incorporate this goal setting in the process, but we need to strive to achieve it on all projects.**



### Institute Staff Training and Education

Provide continuing professional education about sustainability topics, to help assist our design teams to operate effectively. This education will include lunchtime presentations as well as active training on projects and specific task exercises. In addition, support for conference attendance will be included. Use of the office-wide communications tools will ensure that teams and individuals who contribute to the success of sustainable projects are recognized. **Currently our continuing education program is focused on professional licensure requirements (PE / AIA ), but we are in the process of implementing a LEED / GBCI continuing education program. This will serve to formalize the many sustainability offerings we currently offer.**



### Evaluate the Design Process

Incorporate sustainability and energy performance into our existing project peer review and quality program. Projects must be modeled and tracked to give precedent data to successive project teams.

**Implemented a multi-disciplinary council of sustainability leaders to evaluate and share knowledge about effective workflows and processes to support design integration. Standard specifications have been modified to include sustainability requirements, these documents are currently being updated (Summer/Fall 2010).**

**Included in this report are summary graphs indicating project performance against the goals. Approximately 50% of projects are modeled; we need to strive to make that closer to 100% of projects.**



**Sustainable Operations**

Incorporate practice strategies to reduce the overall environmental footprint of our own practice. This will include regular progress towards reduction in energy, water, and waste in our own office and project delivery methods.

- Transportation
- Water
- Energy
- Consumables
- Meetings
- Waste
- Office IAQ
- Office Renovations and Standards

**To date we have implemented a number of key strategies focused on energy and consumables. Each category has some strategies currently implemented or in progress for next year.**



**Develop a Business Strategy**

This includes tracking performance of projects, developing marketing plans, publicizing our successes, and compiling status reports on operational and project achievements to share both with AIA 2030 Commitment, and with clients as well.



## Overview

### Commitment

#### Sustainable Design

As a design firm for some of the world’s largest entities, KlingStubbins recognizes the global reach and ultimate impact we possess to change the circumstances of our environment. We encourage our clients to view sustainability as an inherent and pervasive component of the design process. Sustainability requires an integrated approach to design, looking for solutions together that individual stakeholders cannot solve alone. Even as we strive to help our clients realize sustainability goals for their projects, we are working to achieve our own goals to meet our corporate obligation to society. We have instituted several levels of action to achieve a more sustainable practice.

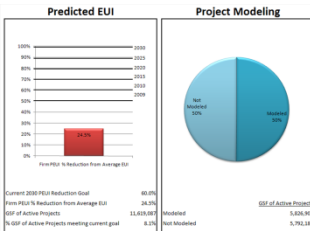
Understanding that the places we design and occupy represent the largest sources of fossil fuel use and greenhouse gas emissions, KlingStubbins has signed on to the AIA 2030 Commitment. We believe that altering our profession’s practices, and encouraging our clients and the overall design and construction industry to join us will be necessary to realize significant reductions in the use of natural resources, non-renewable energy sources, and waste production.

## Definitions



**Architecture 2030 / 2030 Challenge:** Architecture 2030 is a non-profit organization established by Edward Mazria to raise awareness of global warming / fossil fuel crisis. It implemented a challenge to industries and professionals to reduce dependence on fossil fuels by the year 2030.

**AIA 2030 Commitment:** The American Institute of Architects put together a call to all member firms to sign on to collect and post metrics related to progress towards the 2030 Challenge targets. The Commitment included more specificity about what types of actions were reportable, and clearly indicated that both operational and project based targets should be included in these progress reports



### Goals – 2030 Target Levels, by year

#### When implemented, the targets included the following:

- 50% reduction in fossil fuel use: Inception of program (2007)
- 60% reduction in fossil fuel use: 2010
- 70% reduction in fossil fuel use: 2015
- 80% reduction in fossil fuel use: 2020
- 90% reduction in fossil fuel use: 2025

Carbon Neutral in 2030 – Using no fossil fuel / green house gas emitting energy to operate

These targets may be met by a combination of highly efficient buildings and systems, onsite renewable energy systems, and purchase of renewable energy, or certified renewable energy credits (20% maximum).

**Baseline:** The AIA 2030 Commitment team worked to collect baselines that were more specific than the 2030 Challenge had posed. Based on the realities of the design industry, baselines were combined between several sources – CBECS, Energy Star Portfolio Manager, and the New Buildings Institute average EUI standards by type.

## Commitment

KlingStubbins pledges its advocacy of the AIA 2030 Commitment goals

As a member of the AIA Large Firm Roundtable, KlingStubbins made a strong statement of leadership to the profession by signing on to help address the issues facing our society:

*The places where we live, work and play represent the largest sources of fossil fuel use and greenhouse gas emissions in America, as well as around the world. The design and construction industry has made significant strides toward creating high performance buildings of all types and uses. As a result, the industry is positioned to have a profound impact by continuing to foster high building performance and reducing building-related greenhouse gas emissions, energy and fossil fuel use.*

*As architects, engineers, and interior designers, we understand the need to exercise leadership in creating the built environment. We believe we must alter our profession's practices and encourage our clients and the entire design and construction industry to join with us to change the course of the planet's future. A multi-year effort will be required to alter current design and construction practices and realize significant reductions in the use of natural resources, non-renewable energy sources, and waste production and promote regeneration of natural resources.*

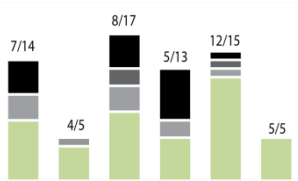
We also support the critical need for more consistent and more rigorous metrics related to actual building performance. We further commit our firm's assistance to the AIA and others in the ongoing development of effective metrics and standards for reporting purposes. It is understood that reporting through the AIA 2030 Commitment program must respect the confidentiality of information about specific clients, projects, and proprietary tools.

Signing this letter signals our conviction that we as a company can be part of the solution to help our industry and our society to improve the environment and insure a safe future for ourselves and our children.

## Implementing 2030: Action Plan

### Integrating 2030 – Action Plan:

This section highlights five specific action items to be set in place and tracked on an annual basis:



### Develop Sustainable Design Goals

Incorporate into project process a goal-setting for each project, whether or not it is pursuing LEED or other sustainable rating system compliance.

#### Set Goals – Energy, Water, Carbon

Each project will set individual goals for energy use, water use, and carbon equivalence for each project. To facilitate that, we commit as a firm that each project will evaluate the following key indicators:

**Energy Star Rating** or equivalent – each project will evaluate its performance relative to the Energy Star rating system. For project types that are not applicable, other baseline databases such as Labs21 will be used.

**Energy Use Intensity** – each project will calculate the energy use intensity (EUI) for the project, as well as breaking it down by different use groups for multi-use buildings.

**Water Use** – each project will calculate and document annual water use for non-process needs, and where possible will document annual process water use.

**Currently approximately 45% of projects incorporate a goal setting session, but we need to strive to achieve it on all projects. The following actions will facilitate this:**

Standard Statement of Criteria / Basis of Design Documentation and project Quality Assurance process (QA) incorporated LEED and Sustainability section in every project baseline – 2004. This ensured that each project team needed to get involved in sustainability discussions in-house and with clients before any packages are issued.

Standard Text to be revised to include 2030 and EUI text – Fall 2010



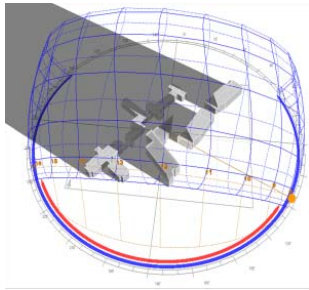
## Institute Staff Training and Education

Provide continuing professional education about sustainability topics, to help assist our design teams to operate effectively. This education will include lunchtime presentations as well as active training on projects and specific task exercises. In addition, support for conference attendance will be included. Use of the office-wide communications tools will ensure that teams and individuals who contribute to the success of sustainable projects are recognized.

**Currently our continuing education program is focused on professional licensure requirements (PE / AIA ), but we are in the process of implementing a LEED / GBCI continuing education program. This will serve to formalize the many sustainability offerings we currently offer**

Proposal approved by senior management to be implemented Fall, 2010 for KlingStubbins to become a USGBC Continuing Education Provider. Proposed list of courses includes:

- Solar Decathlon – Design and Construction
- LEED Project Lessons Learned - Site / MEP / Architecture / Interiors
- Focus on Renewables – Design experience, construction experience
- Green Roof – No Leaks – Case Studies from KlingStubbins project experience
- Daylighting Design from Architecture, Engineering, Lighting perspectives
- Measurement and Verification and how to implement it
- High Performance Engineering – Case Studies
- Energy Modeling – Case Studies for design integration
- Sustainable Laboratories – Planning, Design and Operation
- High Profile Sustainable Projects – Case Studies from across the industry



## Evaluate the Design Process

Develop standard workflows and processes to facilitate enhanced design integration and interdisciplinary cooperation on all projects. Sustainability components incorporated into firm wide design processes and programs such as the executive design reviews and management reviews, project planning templates and technical specifications.

**Implemented a multi-disciplinary council of sustainability leaders to evaluate and share knowledge about effective workflows and processes to support design integration. Standard specifications have been modified to include sustainability requirements, these documents are currently being updated (Summer/Fall 2010). This will be documented in a design integration report, currently in draft form, which covers the following process:**

*Research – Site, Climate, Potentials*  
*Set Goals – Energy, Water, Carbon*  
*Design – Performance-informed decisions*  
*Design – Reduce Needs*  
*Simulation and Feedback*  
*Investigate Energy Source Opportunities*  
*Learn from our Completed Work*  
*Aggregate Carbon / Energy data*

**Approximately 50% of projects are modeled; we need to strive to make that closer to 100% of projects. Lighting Power Density was not collected for this first report, this data must be included in future reports.**

**In order to learn from our completed works, we encourage owners to collect operational performance data. Currently only 4% of current projects have committed to collecting usage data, we will strive to increase this percentage dramatically.**

## Sustainable Operations

Incorporate practice strategies to reduce the overall environmental footprint of our own practice. This will include regular progress towards reduction in energy, water, and waste in our own office and project delivery methods.



**Transportation** – Reduce the number of automobile miles associated with commuting to and from work for our employees:

- Current – Pre-tax transportation savings account to encourage mass transit
- Future – subsidize public transit? Showers and changing rooms for bicyclists?



**Water Use** – Implement water saving technologies in our offices

- Current – Implement lower-flow fixtures where possible in each office
- Future – all offices implement water reductions. Investigate process water reductions as well.



**Energy Use** – Implement energy saving strategies in our offices

- Current – Audit current energy usage patterns in each office, where feasible. Develop 'wish list' for lighting, HVAC improvements in each office
- Future – Implement most cost effective / most impact strategies



**Consumables** – Use less paper, use lower impact consumables

- Current – implement doublesided printing, encourage electronic agendas, minutes, shop drawings, etc.
- Future – Implement coffee mugs, eliminated paper cups, implement water glasses, implement effective dish washing, and reduce waste associated with catered lunches, reduced mercury in lamps



**Indoor Air Quality** – Improve office IAQ

**Waste** – Reduce waste stream

- Current – Recycling at all offices
- Future – Expand to include CFL, Compostable, and other E-Waste

**Office Renovations and Standards** – Set standard practices of renovations – materials, energy and IAQ. KlingStubbins has committed that for all future office renovation and expansion projects they will follow the guidelines to

insure high-performance results for ourselves as well as for our clients.

## Develop a Business Strategy

This includes tracking performance of projects, developing marketing plans, publicizing our successes, and compiling status reports on operational and project achievements to share both with AIA 2030 Commitment, and with clients as well.



**Current focus on this effort has been to expand marketing plans and public information – KlingStubbins website, marketing brochures and boilerplate to reflect current practice and our aspirations. Included in this is the AIA 2030 Commitment status report of project performance.**