

# SUSTAINABILITY ACTION PLAN

June 2010

The places where we live, work, and play represent the largest sources of greenhouse gas emissions and energy consumption 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.

As architects, we understand the need to exercise leadership in 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, realize significant reductions in the use of natural resources, non-renewable energy sources, and waste production, and promote regeneration of natural resources.

We therefore commit Callison, LLC to the AIA 2030 Commitment program.

## SUSTAINABLE DESIGN AT CALLISON

Our goal is to be sought out for our knowledge and ability to lead and educate our clients through complex issues in a fashion that is in balance with their values, location and marketplace. Our experience in the global marketplace gives us the ability to help our clients make informed decisions over a wide range of project types and locations. As an international firm located in Seattle, Los Angeles, New York, Dallas, London, Mexico City, Dubai, Shanghai, Beijing, and Mumbai, we are positioned to be an international leader in sustainable design.



Delhi, India, Office Lobby - Daylighting



Riyadh, Saudi Arabia, Mixed Use Development - Solar Shading



Edmonton, AB, Medical Center - Daylighting and High Performance Envelope

## SUSTAINABLE DESIGN PROCESS

### WHERE WE ARE NOW

We are committed to developing strategies to effectively track and reduce the energy consumption of our projects, working within the unique framework of international design in the developing world. Unlike the US, many of the markets we operate in do not have data on existing building energy use or energy use targets. Project team structures and processes greatly differ from domestic work. The first step towards reducing building energy usage is to track both the projected and/or - if available - the actual energy usage of the projects we design. Callison's in-house energy modeling team currently works with selected project teams beginning in the master planning and concept design stages. They calculate and track project EUI (Energy Use Intensity) and work with the project teams to integrate the most effective energy reduction strategies into each project.

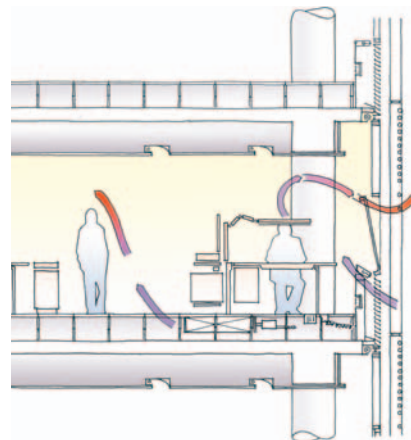
Projects also undergo a full climate analysis and sustainable design review to evaluate other potential sustainable design strategies including water reduction, waste reduction, material selection, and air quality strategies appropriate for the particular location.

Callison has a suite of sustainable design tools and resources that we continue to update and expand. These include:

- The Matrix – Callison's web based sustainable design tool including energy, water, waste, materials, and tools strategies
- Climate based sustainable strategies recommendations
- Market based sustainable strategies recommendations
- In-house climate analysis
- In-house energy modeling
- In-house daylight analysis
- A database of our sustainable design projects which tracks major strategies implemented on each project



Manila, Philippines, Retail Center - Passive Cooling



Hanoi, Vietnam, Natural Ventilation



Jackson Hole, Wyoming, Hotel - Material Selection

## SUSTAINABLE DESIGN PROCESS

### OUR GOALS

Callison's goal is to energy model every project and to bring our projects in line with Architecture 2030 energy consumption targets. We do not stop with resource reductions, however; we strive for compellingly thoughtful and beautiful design, responsive to climate, site and client. In our process we seek to make building energy and water use performance form-giving criteria for all projects we design. In our efforts to reach these goals we have committed to expand our energy modeling and sustainable design review program on the following time table:

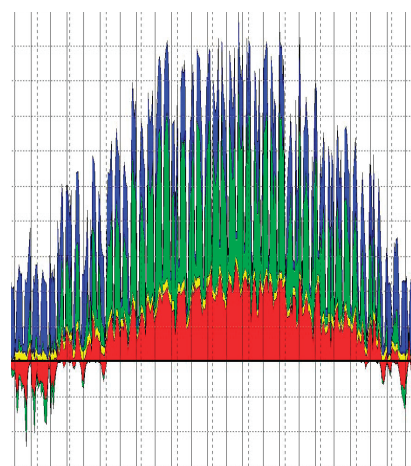
- NOW: Minimum of every project over 1,000,000sf
- By June of 2011: Minimum of every project over 500,000sf
- By June of 2012: Minimum of every project over 250,000sf
- By June of 2013: Minimum of every new construction project

As we expand our energy modeling program we are creating a growing database of energy statistics for each of our market regions, allowing us to further refine our energy modeling procedures and evaluate the effectiveness of various strategies in different areas of the world. Over time energy modeling will also become ingrained in the Callison design process and culture. We also encourage our clients to monitor actual energy use to allow us to verify the accuracy of our models. We strive to deliver the best possible product to our clients through the use of performance driven, state of the art design that responds to climatic, cultural, and environmental parameters.

We also commit to expand and refine our existing database of sustainable design projects with the goal of tracking energy, water, waste, air quality, and materials performance on all projects.



Hanoi, Vietnam, Mixed Use Tower - Sky Gardens



Passive Thermal Gains Analysis



Chengdu, China, Mixed Use Tower - Building Orientation and High Performance Envelope

## STAFF TRAINING AND EDUCATION

### WHERE WE ARE NOW

Callison University, Callison’s in-house training and education program, currently offers more than 75 in-person or web-based courses on a range of sustainable design topics throughout our offices, world-wide. In addition, Callison encourages participation in outside sustainable design courses and accreditation programs. We currently have 119 LEED APs and 5 CSBAs on staff. Callison regularly issues briefs to our principals covering various topics related to sustainable design, and requires specific sustainable design expertise of all our directors and principals.

### OUR GOALS

Callison continues to expand our sustainable design curriculum to offer greater opportunities to all our employees to increase their knowledge of sustainable design. We are also pursuing GBCI accreditation for our in-house training programs to further benefit our LEED accredited employees. We are updating our annual review process to expand sustainable design objectives for all employees.

## SUSTAINABLE OPERATIONS

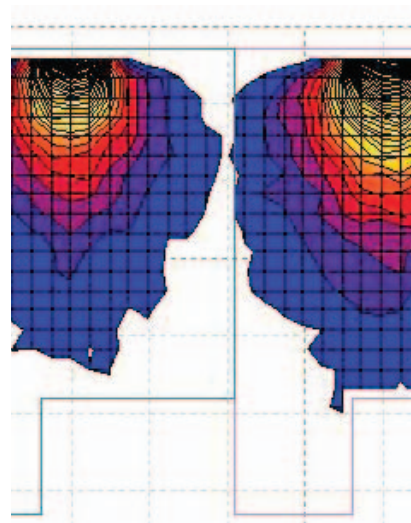
Callison follows a Sustainable Operations Plan that was implemented in 2008. Our clients look to us to guide them in selecting sustainable design measures that make sense for their business. What makes sense for them can make sense for our business as well. Callison implements many sustainable practices in our day-to-day operations and continues to seek additional opportunities.

From composting kitchen waste to buying recycled-content paper the firm has been responding to the changing marketplace, where more options are available for little or no cost. We’ve also added bigger impact items such as hybrid electric vehicles and web conferencing to our operations to save energy, reduce our carbon footprint and contribute to a culture of sustainability. We are demonstrating our belief that sustainability is just good business, and that by changing habits we can save costs and use the planet’s resources more wisely.

Callison is also a member of the Seattle Climate Partnership, and as part of this partnership we have committed to track our carbon footprint and continue to find new ways to reduce our impact on the environment.



Riyadh, Saudi Arabia, Mixed Use Tower - Solar Shading



Riyadh, Saudi Arabia, Daylight Analysis



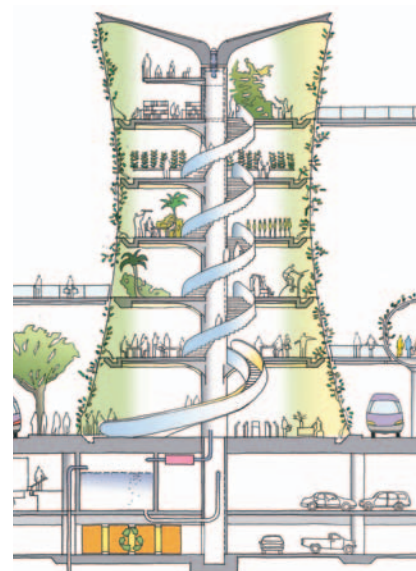
Hanoi, Vietnam, Retail Center - Daylighting and Radiant Cooling

## REPORT PROGRESS

As members of both the AIA 2030 Commitment and the Seattle Climate Partnership, Callison is committed to tracking and reporting our progress both in how we operate and how we design.

## OUR FUTURE

Buildings are responsible for 48 percent of the energy used in the U.S., and approximately 40 percent of global energy consumption. As major designers of the built environment, Callison is in a position to have a profound impact on our world. Through education, technical expertise and the projects we create we can positively impact people from all walks of life at every level, every day.



Manila, Philippines, Transportation Hub with Urban Farming



Anyang, South Korea, Residential Tower - Sky Gardens



Mumbai, India, Mixed Use Master Plan