

LEDDY MAYTUM STACY ARCHITECTS

SUSTAINABILITY ACTION PLAN

2012



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SUSTAINABLE DESIGN

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COMMITMENT

LEDDY MAYTUM STACY ARCHITECTS (LMSA) has established a national reputation for the design of sensible, sustainable environments over the last 30 years. We begin by developing practical, economical connections between the built environment and the natural world. This attitude leads us directly to integrated design responses to a variety of issues, including environmentally appropriate strategies for site and land use, energy efficiency, building materials, indoor air quality, ergonomics, water conservation and waste reduction. It results in the creation of healthy and inspiring spaces that connect us to the rhythms of nature and foster environmental stewardship on a daily basis.

Sustainable design is deeply embedded within our firms culture. In the 1980's our principals were designing award-winning solar housing. In 1997 LMSA was the fifth architectural firm in the nation to join the U.S. Green Building Council. Today, almost 70% of professional staff are LEED accredited professionals.

LMSA joined the 2030 Commitment in 2011 to reaffirm our core value of integrating sustainable design and high performance architecture within our pursuit of design excellence. This document is a working report to guide our firm towards even more ambitious goals.

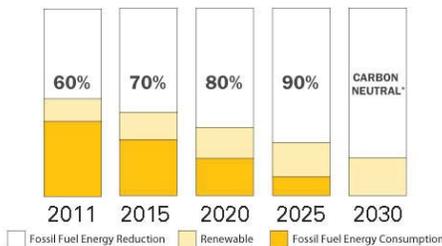


LMSA GOALS

GOALS

We've identified five key elements to help LMSA fulfill the 2030 commitment:

- 1. Leadership:** Internally, we've created a Sustainability Action Team that will help guide our firm toward the performance benchmarks. Externally, we actively pursue opportunities to share our knowledge with our peers.
- 2. Research:** We've created an in-house research team to explore new materials, strategies and tools.
- 3. Data Collection:** We've instituted a program to collect energy performance data of our projects and we're working to incorporate LEED certification or equal standards into all projects.
- 4. Operations:** We're working to minimize our firm's environmental impact and improve our office environment.
- 5. Communication:** We encourage an open dialogue within our firm, with our consultants and clients that continuously challenges assumption and identifies ways to meet the goals of the 2030 Commitment.



The 2030 Challenge
 Source: ©2010 2030, Inc. / Architecture 2030. All Rights Reserved.
 *Using no fossil fuel GHG-emitting energy to operate

Benchmarks: LMSA is committed to meeting the benchmark goals of the 2030 Commitment. Our projects that have a completion date before the 2015 benchmark will target a minimum of 60% less energy use than the CBECS baseline. We will work closely with our consultants to clearly define

“We believe green design is simply good design”



project energy goals at early design stages and track status carefully throughout all project stages to ensure success.

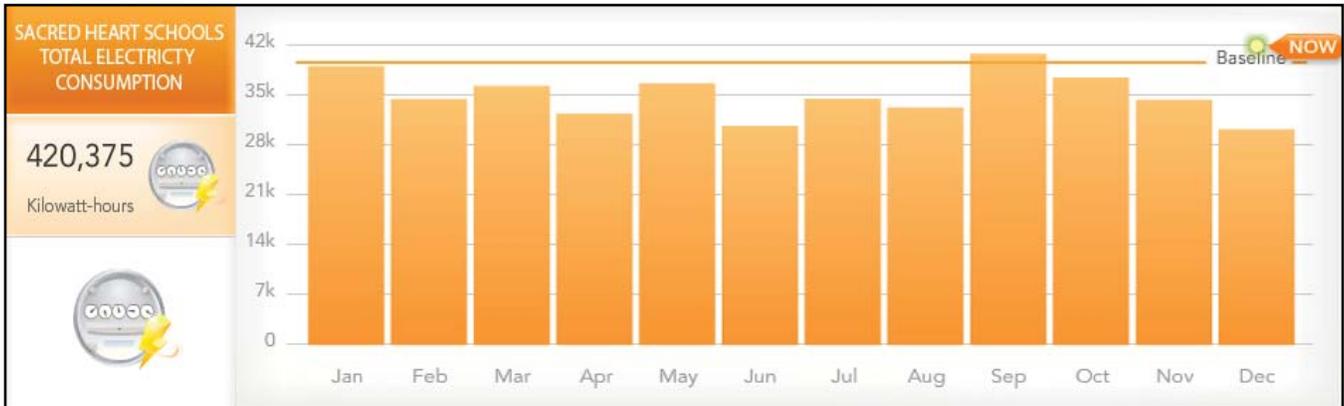
Design that Matters: Enduring design requires commitment. Our design process is grounded in the collaborative search for contemporary, rational, economic, and sustainable solutions. We seek to build to the highest standards of our time. The 2030 Commitment is a powerful tool to help us meet this goal.

Community: Everyone at LMS^A is encouraged to be advocates for environmental responsibility. From giving lectures and teaching classes, to riding our bikes to work, we strive to model environmental stewardship to our community. By raising environmental awareness in our community we help to communicate the importance of individual action in building a just, sustainable future for all.

PROGRAMS AND ACHIEVEMENTS

LEED Certified Projects: Through 2011, LMS^A has achieved LEED certification on nine projects; four-platinum, two-gold, two-silver, and one-certified project. Currently we are pursuing LEED certification on eight additional projects, two of which are tracking LEED Platinum. It is our goal to achieve a LEED certification or equivalent on all of our projects.

Net-Zero Energy Projects: In 2010 we completed a Net Zero Energy/Carbon Neutral single family home in a typical



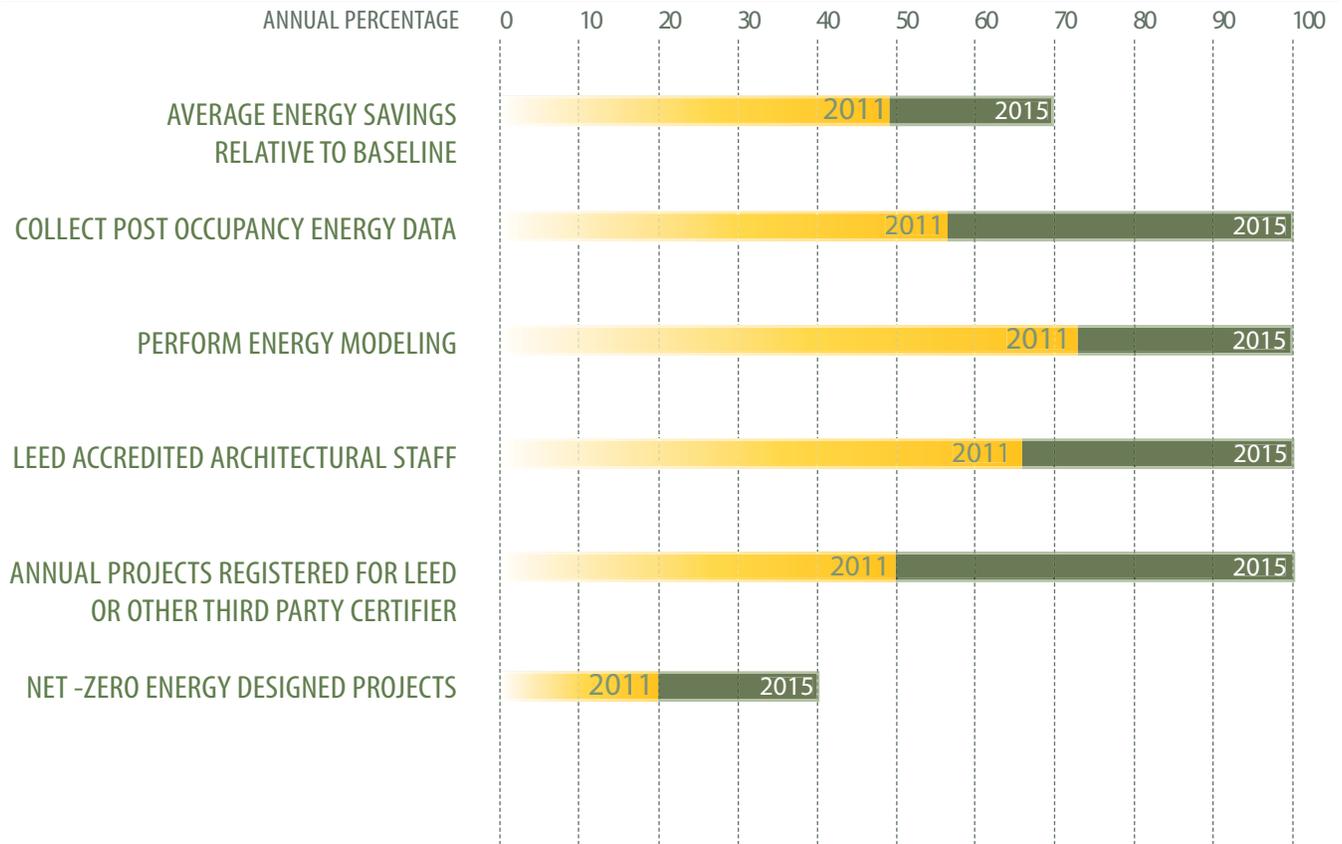
suburban neighborhood. The design utilizes conventional construction materials and readily available building technologies serving as a case study for a Net-Zero Energy living. In the past year we designed a Net-Zero Energy community for sixteen adults with autism. This ground breaking project will serve as an innovative model for addressing the critical housing shortages for this growing population with healthy zero energy dwellings. At the end of 2011 we started work on a high school gymnasium that’s targeting Net Zero Energy as well. LMSA is actively pursuing several potential projects with Net Zero Energy goals.

Recognition: We regularly participate in local and national green building award programs. LMSA is proud to have been recognized four times the National AIA’s COTE Top Ten Green Projects program.

DATA COLLECTION

LMSA has made it a goal to collect post-occupancy energy data from all of our future projects. Understanding how our buildings actually perform is an important link to translating past experience into future success. In order to improve the performance of our designs, we need good baseline data from past experience.

2011-2015 LMSA^A DESIGN GOALS



OUR DESIGN PROCESS



PROCESS

In our experience, successful projects result from regular, open and efficient communications between the owner, contractor and the design team. Working towards an integrated design approach will ensure that all parties contribute towards the common goals of the 2030 challenge. LMSA works closely with our highly qualified and specialized consultants to develop the most efficient and appropriate designs possible.

TOOLS

LMSA will continue to explore new tools and technical references for future projects. We enjoy an ongoing relationship with the Pacific Gas and Electric (PG&E) Energy Center focused primarily on daylighting, glazing, and shading strategies. In addition, we've worked with PG&E's "Savings by Design" program to help enhance energy performance of our project. Currently, we utilize the following tools throughout our design process and will work to more effectively utilize them on future projects.

- Google SketchUp for massing orientation and shadow analysis
- EPA Target Finder for Energy Star research
- U.S. Energy Information Administration website.
- AutoDesk Revit with project Vesari for energy modeling
- Pharos Project for product information and life cycle analysis
- EcoTect for energy modeling



TRAINING + EDUCATION

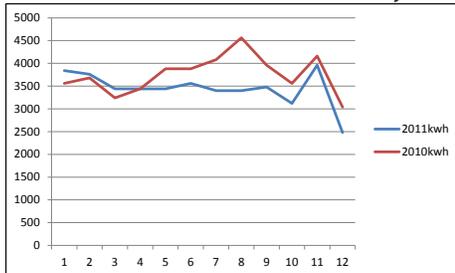
At LMSA we encourage all architectural staff members to pursue LEED accreditation. Currently, 66% of the architectural staff are LEED accredited. The firm pays for expenses and time needed to take exams and maintains up to date study guides for staff use.

Our firm values continuing education. The cost of attending seminars and workshops is reimbursed by the firm and attendees share information gained with the rest of the office. Throughout the year, we organize lunches to learn about new sustainable products, strategies and software as they become available. We have office pin-ups at the transition of each design phase of each project to facilitate a robust internal dialogue.

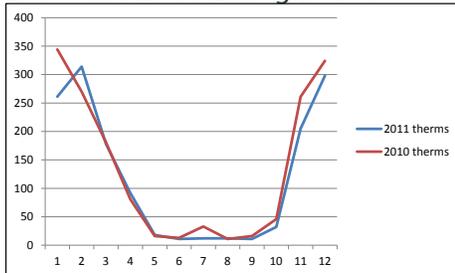


SUSTAINABLE OPERATIONS

2010 and 2011 LMS electricity use



2010 and 2011 LMS gas use



Our business practices and office environment reflect the professional values of our firm. LMSA has been a certified San Francisco Green Business since 2009. This membership has raised our office's environmental awareness and encourages everyone in the firm to participate in our sustainable operations daily.

Water Gas and Electricity

We selected our current leased office space partly due to its abundant natural light. Over time, we have upgraded building insulation and systems. The office utilizes instant hot water heaters to minimize energy use. Occupancy sensors control lighting in the hallways and bathrooms. Our goal is to continue to update the office lighting and utilize more occupancy sensors in the conference rooms and other common spaces. During the summer of 2011 we had significant maintenance performed on the heating system and have tracked a 10% decrease in total energy use in 2011 compared to 2010. In 2008 our firm signed the Energy Star Commitment Form, agreeing to upgrade equipment in our office as well as promoting Energy Star appliances in our work.

Transportation

Our office is located in San Francisco's South of Market District, within walking distance of multiple bus, train, and light rail lines. Our staff takes full advantage of alternative modes of transportation which we encourage by offering subsidies through a "Commuter Check" program. Our annual bike ride to the beach encourages employees to get out and ride.

**Office Transportation facts:**

- 35% of the staff ride a bicycle everyday to work.
- 40% of the staff take public transportation everyday to work.
- 75% of all staff use alternative modes of transportation.
- For the times that we need to drive, our office maintains two low emission hybrid vehicles.
- Currently we have six projects that are within walking distance or one public transit stop of our office.

Paper and Waste Management

Our office has implemented a recycling, compost and waste management policy that helps us to minimize landfill volume. Additionally, we have established a paper management policy that includes the following procedures:

- All workstation defaults are set to print double side prints.
- Daily prints and copies are on 100% recycled paper.
- When possible, electronic copies are used to reduce paper waste.

We are starting to track the amount of paper we purchase on an annual basis. In addition we are starting to implement better electronic communication methods to reduce paper use during construction.

BUSINESS STRATEGY



Clearly communicating the environmental, social, financial and aesthetic benefits of sustainable design deepens our understanding of design opportunities, broadens our clients' knowledge base and increases our collective ability to achieve projects success. To help facilitate this process, the partners at LMSA often give presentations and lead discussions that outline the many advantages and benefits of sustainable design. These discussions typically describe site considerations, water saving strategies, natural ventilation, day lighting, energy saving strategies, and material quality.

For over 30 years, our business strategy has been to leverage our long-standing experience in the careful integration of sustainable strategies within our broader conception of design excellence. But our focus is on developing an even more rigorous engagement of this critical issue in the future.