

Sustainable Communities Program

Sun Harbor Marina, Mixed Use



“Development that satisfies the objectives without sacrificing our natural resources for future generations, is “building responsibly”. Choosing the right materials, minimizing energy use, maximizing water efficiency and creating a healthy work environment is absolutely the future of building. Helping protect our earth makes the payback much more than the substantial money saved.”

– Mary Lou LoPreste,
Former General Partner/Marina Manager

In June of 2006, Sun Harbor Marina became the first LEED® Certified marina in the world. Concern about the environment compelled Mary Lou LoPreste, then Partner/Manager of Sun Harbor Marina, to rebuild the old marina using sustainable environmental practices. According to Ms. LoPreste, designing for Leadership in Energy and Environmental Design (LEED) is a team experience requiring cooperation and “out-of-the-box” thinking for all team members. The design was inspired by a European village, demonstrating that a high performance building can also be beautiful.

Sustainable Features

SUSTAINABLE SITES: Bicycle racks and showers are provided to encourage employees and tenants to cycle to work. Parking spots for carpools and hybrid vehicles encourage the use of alternative transportation. Two bus stops within walking distance encourage the use of mass transportation. Shade trees covering over 30% of the parking lot and light-colored recycled paving reduce the heat island effect.

Public art, a mosaic fountain sculpture, creates a focal point and meeting place that attracts visitors to the LEED Information Center where they can learn more about the “whole system” approach to designing environmentally friendly buildings.

Sun Harbor Marina, which has been in business for over 60 years, moved into their new facilities in May 2005. This three-building, mixed-use new construction project features office and retail space, a restaurant and docks with slips for 105 boats. Following the US Green Building Council guidelines for sustainable buildings, the design lowers operating and maintenance costs, conserves resources and enhances occupant comfort, health and productivity.

All buildings were designed and constructed to greatly exceed California’s Energy Efficiency Standards; two buildings exceeded by 41%. Building commissioning was performed to ensure the correct equipment was installed and operating within specifications to maximize energy savings.

Project Overview

Size: 14,000 square feet

Location: Harbor Drive, San Diego

Completion Date: May 2005

Building Type: Marina/Office

Energy Efficiency (% below Title 24): East Building 41%, West Building 41%, Restaurant 12%

LEED Credits:

- Sustainable Sites - 5 points
- Water Efficiency - 2 points
- Energy & Atmosphere - 9 points
- Materials & Resources - 0 points
- Indoor Environmental Quality - 6 points
- Innovation & Design - 4 points
- Total received - 26 points

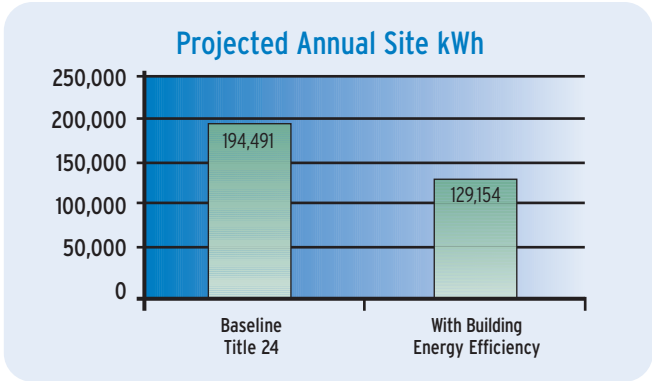
WATER EFFICIENCY: Automatic drip irrigation, low flow faucets and shower heads, sensors on faucets and low flow toilets reduce the use of potable water and the amount of water going to the sewer.

ENERGY & ATMOSPHERE: Innovative light shelves extend natural daylight into the interior of the building while reducing glare and saving energy. Advanced lighting controls have sensors that automatically switch off and take advantage of daylighting. High performance glass

is designed to reduce heat gain in summer and reduce heat loss in winter while still allowing high quality visibility to the outdoors.

MATERIAL & RESOURCES: Rapidly renewable building materials such as bamboo flooring and compressed sorghum cabinets were selected to conserve natural resources. Entry grates are made from recycled airplane tires and bathroom partitions are made from recycled plastic bottles. Recycling is encouraged by the convenient placement of recycling bins near the stairwells and entry doors of each building.

INDOOR ENVIRONMENTAL QUALITY: Beautiful views of San Diego harbor from 90% of the office spaces connect the occupants to the outside marine environment. Natural ventilation is provided by operable windows in each office to catch the ocean breezes. To minimize indoor pollutants entry grates are provided at entryways to prevent dirt and particulates from entering the building. Separate ventilation for the cleaning supplies storage area, low-VOC paints, adhesives and carpets ensure healthy indoor air quality.



INNOVATION & DESIGN: Sun Harbor Marina was designated a Clean Marina by the Clean Marinas California Program, a program developed to provide clean facilities to the boating community and protect the state's waterways from pollution. Visitors can learn about the project's sustainable features through educational signage, the LEED Information Center and their website.

Lessons Learned

PROJECT TEAM: Before the design process commences make sure the entire project team fully understands the LEED process, their roles and responsibilities.



According to Ms. LoPrete "Have everyone on the team on board."

LEED EXPERIENCE: Early in the design phase make sure at least one team

member has experience with the entire LEED certification process.

CAREFULLY TRACK DOCUMENTATION: Nominate someone to keep track of all the required documentation. Meet regularly with the owner, architect, consultants and construction crew to ensure that documentation is being kept and filed for easy retrieval.

SUSTAINABLE DESIGN ATTRACTS TENANTS: This high-quality project has attracted stable tenants paying premium rents. During the first year of operation the low vacancy rate was directly attributed to thoughtful design and attention to occupant comfort.

Team

- Building Owner:** Sun Harbor Marina Partnership
- Architect:** Caitlin Kelley Architecture
- Energy/Sustainability Consultant:** Sustainable Earth Enterprises
- LEED® Consultant:** Drew George & Partners
- Mechanical & Electrical:** Southland Energy Consultants
- Utility:** SDG&E®

Financial Summary

- Construction Cost:** \$4 million
- Total Incentives:** \$17,952
- Annual Savings:** \$10,300

Resource Summary

- Annual Electricity Saved:** 65,337 kWh
- Annual Gas Saved:** 228 therms
- Annual Water Saved:** 88,571 gallons

For more information about the Sustainable Communities Program, go to www.sdge.com/sustainable.