



BEAUSOLEIL

Louisiana Solar Home UL LAFAYETTE SoAD
soad.louisiana.edu

BUILD AN OFF-THE-GRID HOME

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BeauSoleil means “Beautiful Sun” in French or simply “Sunshine” in Cajun French. BeauSoleil is also a Grammy-winning Cajun band whose members have served as ambassadors of Cajun culture for over thirty years. Following this precedent, the BeauSoleil solar team of the University of Louisiana at Lafayette School of Architecture and Design, proposes to design and build a solar decathlon house that uses renewable energy sources in a culturally resonant form.

We would like to ask for your partnership in this exciting and rewarding endeavor. The design and construction process will require two years of work. We need you as a partner: we want you to be a part of the process, we want to utilize your ideas, concepts and products, and we need your financial support. Ultimately, the house we design will be a prototype for hurricane rehabilitation and affordable housing.

CONCEPTUAL CRITERIA FOR THE BEAUSOLEIL LOUISIANA SOLAR HOME:

1. a uniquely regional work of architecture.
2. a balanced technological hybrid of passive and active systems
3. a marketable prototype for housing



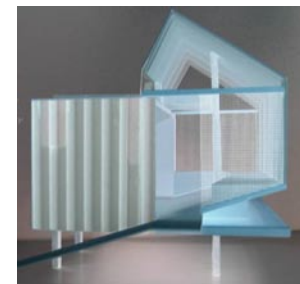
UL Lafayette SoAD students Gretchen Vanicor, Eric Kimbrough, Gate Boonklurb, Shari Thompson

The Solar Decathlon

The Solar Decathlon is an international competition in which teams of university students compete to design, build, and operate the most attractive, effective, and energy-efficient solar powered house. The inaugural event was held in 2002, and the most recent competition was just completed in the fall of 2007. The 2009 Solar Decathlon will be the fourth such competition. In late September 2009, college and university teams from around the world will join the competition’s organizers and sponsors in Washington, D.C. to assemble a “solar village” on the National Mall. Thousands of visitors stand in line every two years to tour these extraordinary homes. The U.S. Department of Energy’s Office of Energy Efficiency and Renewable Energy is the primary sponsor of the Solar Decathlon. (www.solardecathlon.org)

Regional Approach

The BeauSoleil Home will be **regionally responsive** in several ways. First, the architectural vernacular of Louisiana will be integrated into the design through sensitivity to typologies and materials. Second, **the house will address the climate and culture of South Louisiana.** Understanding that a building form itself does not make a home, we will design a village of these homes that can support the community of relationships and the communication between people that makes a place “home.” Thus, the BeauSoleil Home can provide for the continuing need in rural South Louisiana for housing.



K. Colley, UL Lafayette SoAD student

A Balanced Technological Hybrid

UL Lafayette has a long and intimate relationship with sustainable practices and alternative energy research dating back to the solar home Professors Edward J. Cazayoux and Hector LaSala built on the UL Lafayette Research Center Cade Campus over twenty years ago. In 1982 it received an award from the Department of Energy for Design Innovation marking one of the high points of UL Lafayette's commitment to alternative energy research and regionally specific design. Many generations of UL Lafayette architecture graduates have been educated in the ecological principles that are represented in this early prototype. Acadiana is a living culture where **the vernacular Acadian, shotgun and Creole houses continue to demonstrate the principles of a culture that does "more with less."** From this rich history, we envision the successful use of passive strategies brought into the twenty-first century. Our hybrid approach to systems integration in the BeauSoleil Home is premised on both the **employment of both passive and active energy systems.** This hybrid allows our proposal a level of marketability that others have lacked, exactly because of our **regional responsiveness and a design strategy of adaptation.**

A Marketable Prototype

A key goal of the Solar Decathlon is to "demonstrate solar technologies in marketable applications through technology development and key partnerships." **According to the 2005 census, the median income in Louisiana was \$36,729.** Assuming a slight increase to \$40,000 following Hurricanes Katrina and Rita due to increased federal funding and a reduced population, HUD's Ginnie Mae home calculator estimates the maximum affordable house cost at \$100,000. At the nominal Solar Decathlon House size of 700 square feet, the average cost would need to be \$143 per square foot after the prototype is in full production to be affordable by the median income family in Louisiana. Therefore, although difficult to estimate, the prototype cost can be twice the full-production cost or \$286 per square foot. This is the economic goal we have set for ourselves in order to achieve market viability.



What You Can Do:

We need your partnership in the design/construction of the BeauSoleil Louisiana Solar Home and we need your partnership in fund-raising. The Department of Energy will fund \$100,000 for the project. However, we require an additional \$300,000 (for innovative technology/material research and transportation of the house to Washington, D.C.) in order to complete this intensive two-year long endeavor. Therefore, we offer you this exciting and rewarding opportunity to receive prominent recognition as a partner in this revolutionary process of rebirth for Louisiana. Partners will be recognized in print and in the actual completed home.

The Live Oak tree is the metaphor for a new paradigm of living on the coast: a strong, environmentally-sound structure which allows for evolution and the cycle of destruction and new growth. In a category five hurricane, the community will indeed lose foliage but the trunk and limbs of the community will remain, allowing for a new rebirth.

- W. GEOFF GJERTSON, UL LAFAYETTE

PARTNERSHIP LEVELS:

- **Live Oak Tree Partners:** **\$25,000 and Up**
- **Magnolia Tree Partners:** **\$10,000-\$24,999**
- **Crepe Myrtle Partners:** **\$5,000-\$9,999**
- **Pine Tree Partners:** **\$1,000-\$4,999**
- **Live Oak Seedling Partners:** **\$5-\$999**

Tax-Deductible Financial Contributions may be made out to:
"BeauSoleil Louisiana Solar Home" and mailed to:

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