



INSTITUTE FOR  
Sustainable  
Communities

# Gulf Coast Sustainable Economies Leadership Academy

A Resource Guide for Local Leaders





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## Introduction & Overview

This Resource Guide complements the *Gulf Coast Sustainable Economies Leadership Academy*—a unique training and peer learning workshop for cross-sector teams of local government, nonprofit, and private sector leaders. The purpose of the Academy (May 2<sup>nd</sup> - 4<sup>th</sup>, 2011, New Orleans) is to empower and accelerate regional sustainable economic development programs, and build the capacity of development practitioners to implement projects in the realms of energy efficiency, renewable energy, ecological restoration, and community resilience. Toward this end, the Academy is focused on showcasing and sharing new, emerging, and best practices, and forging new partnerships between like-minded leaders who are working towards a more resilient and prosperous Gulf Coast.

### What do we mean by sustainable economic development?

Sustainable economic development is development that integrates positive environmental, social, *and* economic benefits—often called the “triple bottom line.” Projects remain attractive to investors, yet their benefits extend equally to community stakeholders and their surrounding natural environments. Sustainable economic development in the Gulf Coast can enhance the longevity and vitality of the region by taking advantage of comprehensive “win-win” development solutions.

For example, Global Green New Orleans, in partnership with Lower 9<sup>th</sup> Ward Center for Sustainable Engagement and Development (CSED), has developed a “Build it Back Green” program to train and employ local energy efficiency contractors to rebuild the homes of low-income residents (see case study, page 7). Benefits from the program are shared across the community: residents save up to 35% on utility bills, local contractors find new work and learn new, marketable skills, and pollution from wasted home energy consumption is reduced. The group claims that if 50,000 homes destroyed by Hurricane Katrina were rebuilt to energy efficiency standards, residents would save \$38 to \$56 million in utility costs per year—a much needed economic stimulus.

The Bayou Auguste Restoration Project, managed by the Gulf Coast Community Design Studio (GCCDS) in Biloxi, Mississippi, offers another example. Restoring a polluted bayou in a low-income neighborhood, the project is engaging local school children in hands-on environmental education, while helping to restore an ecologically important wetland (see case study, page 42). What was once a forgotten natural resource now has the potential to become a favorite destination and focal point for the community that will be more storm-resistant and attractive to businesses and tourists.

This Resource Guide showcases 11 case studies of initiatives like these across the Gulf Coast and beyond, whose promising practices reflect key components of regional, sustainable economic development. The Guide also synthesizes what its authors believe to be among the



best federal, state, and local grant and technical assistance programs available to economic development practitioners.

## The challenges and opportunities of sustainable economic development

To better understand the best application of sustainable economic development in the Gulf Coast, the Institute for Sustainable Communities interviewed the majority of Academy participants, as well as more than a dozen regional sustainable economic development experts. These interviews revealed four main challenges and opportunities, each addressing an essential piece of a holistic, well balanced sustainable economic development strategy.

***Economic diversity and workforce development.*** The Gulf Coast enjoys an abundance of rich coastal ecosystems and natural gas reserves, both of which have contributed greatly to the region's prosperity and cultural identity. Three key industries—oil and gas production, fishing, and tourism—rely on these resources, and have formed the foundation of the Gulf Coast economy for generations. Yet, Hurricanes Katrina and Rita and the Deepwater Horizon oil disaster hit these industries hard, with devastating impacts still felt throughout the economy today. To many, these man-made and natural disasters have exposed the region's over-reliance on a few dominant, yet vulnerable industries.

To address this issue, many in the Gulf Coast have embarked on economic diversification programs designed to incubate new industries that will add resilience to the region's economic base. Energy efficiency, renewable energy, and ecological restoration are three emerging pieces to this strategy, given their potential to save money, create new jobs, diversify the region's energy supply, and establish greater resilience to natural and man-made disasters.

Incubating new industries requires the right mix of demand and workforce development. Fortunately, several initiatives throughout the Gulf Coast have begun to connect these dots. For example, over the next five years, Pearl River Community College (PRCC) in Poplarville, MS, expects to train up to 1,000 new workers in its solar technology training program—an initiative tied directly to a new solar cell manufacturing plant in Hattiesburg, MS (see case study, page 16). In New Orleans, Global Green's "Build it Back Green" program has begun to tap into a huge, unmet demand for energy efficiency services.

By supporting a local workforce, and directing services to populations with the most need, these programs are diversifying local economies and cultivating new skills and services that contribute to long-term growth.

***Financing.*** Financial capital is required for success in any new venture, including sustainable economic development projects. Many communities have expressed anxiety over dwindling federal recovery dollars, especially while some financial institutions have been reluctant to invest in the region. Yet financing opportunities do exist for projects that are advancing promising, sustainable solutions to recovery and development. Federal grant-making bodies such as the Department of Energy's (DOE) Office of Economic Impact and Diversity (OEID) and

the Department of Agriculture's (USDA) small business programs are actively seeking partners in under-served communities. Private foundations such as the Gulf Coast Fund and the Gulf Coast Funders for Equity are making targeted investments toward a more resilient Gulf Coast. And, financial institutions are stepping up their programs, sometimes with more innovative, alternative financing mechanisms.

In St. Lucie County, FL, the Solar and Energy Loan Fund (SELF) was created to help residents make their houses more energy efficient and take advantage of solar energy technologies. In partnership with local banks, the DOE, and county government, the program is providing 4% interest loans to fund efficiency upgrades and solar installations. The program has been hugely popular, with 27 completed audits and 139 application requests in the first few months of operation (see case study, page 21). A second financing program, Georgia Green Loans, has loaned roughly \$1.5 million for energy efficiency projects and green business development in 68 counties across Georgia since its inception in 2009 (see case study, page 28).

Additionally, in the city of Lakeland, FL, Regenesys, Inc. has begun using power purchase agreements—long-term contracts that include free installation of renewable energy systems in return for flat-rate, monthly energy bills—to accelerate the distribution of solar thermal systems (see case study, page 37). The company installs these systems with no up-front costs, and collects a flat monthly fee for hot water service. Regenesys' program has reduced hot water costs while removing financial barriers to entry for homeowners. With current demand, Regenesys hopes to expand its program to 6,000-10,000 homes in the next five years.

These and other programs are proving that traditional barriers to financing can be overcome with innovative business models and strong cross-sector partnerships.

***Collaboration and information sharing.*** Recovery efforts in the Gulf Coast are often fragmented and overwhelming. Information about potential grant dollars, technical resources, and recovery programs can be difficult to track, and communities often feel left out of the process. Many communities lack resources to follow regional trends, with staff that are already stretched too thin. More than ever, communities are expressing a need to learn from their neighbors, share resources, and forge new, regional partnerships.

Smart Coast, a nonprofit organization working throughout coastal Alabama, has been using regional collaboration to open new, previously unknown possibilities in smart growth—a development strategy that reduces urban sprawl by focusing on mixed-use, walkable urban environments (see case study, page 47). By bringing together business, government, and nonprofit leaders from across coastal Alabama, they have succeeded in advancing new smart growth planning frameworks in five coastal cities and even launched a sustainable business network with 12 leading regional businesses. Smart Coast has discovered firsthand that working with partners can help overcome what has often been a disjointed economic development effort.

When staff of the Alabama Coastal Foundation (ACF) and Mobile Baykeepers (MBk) realized the enormity of the clean up required after the BP oil spill, they knew that they would need to greatly expand their efforts and reach out to new partners. ACF and MBk teamed up with The Nature Conservancy (TNC) to devise an ambitious plan to restore all ecosystems along Alabama’s entire coast over the next five years (see case study, page 54). Since 2010, the collaboration has grown to over a dozen cross-sector partners, engaged thousands of volunteers, and employed and trained more than 20 of out-of-work fishermen.

As these programs have shown, collaborative efforts tap into existing resources more effectively, and often uncover new opportunities only possible through partnerships.

***From recovery planning to action.*** Six years after Hurricane Katrina, and one year after the BP oil disaster, communities across the Gulf Coast express frustration with extended recovery planning and a lack of on the ground action. Many feel that the time is now to share best practices, and replicate successful models.

Faced with the task of rebuilding more than 13,000 severely damaged or destroyed homes, the Terrebonne Readiness Assistance Coalition (TRAC) developed an innovative partnership with MIT and Oxfam America. Together, they designed the Louisiana Lift House—a house built an average of 10-14 feet above sea level—which is highly affordable, storm-resistant, energy efficient, and designed with bayou culture in mind (see case study, page 59). With the first pilot houses completed, TRAC is now positioned to replicate their housing model on a massive scale across the region.

In Coden, AL, the South Bay Communities Alliance (SBCA) opened a Hurricane Response Center in 2006 to provide a safe haven for storm events and a gathering spot for the community. In recognition of the need for immediate action, SBCA opened the center with very little funding and relied completely on volunteers for staffing—and to pay much of the center’s operating costs. The effort caught the attention of the Musk Foundation and the California-based company SolarCity. They donated a \$200,000, 25-kilowatt solar system, with battery backup, which now sits atop the roof, powering the Hurricane Response Center. The solar installation is one of the largest in Alabama (see case study, page 64).

In 2007, Greensburg, Kansas suffered near complete destruction from an EF5-class tornado. Just seven months later, the town passed an ambitious building ordinance, mandating every city building be reconstructed to the highest green building standards (see case study, page 68). The town of only 900 people now boasts 26 green-certified buildings, has attracted international attention, and earned dozens of awards, including—both in April 2011—a Sustainable Community Award from Siemens and a Global Green City award from the United Nations. Inspired by this success, the John Deere Company even erected a new wind farm, which now powers the entire town—a development not possible without bold rebuilding action.

\* \* \* \* \*

With so many promising practices throughout the region, communities are finding more ways to learn from each other and fulfill the Gulf Coast's unique development opportunities. Sustainable economic development fills an important role in this effort by focusing on long-term projects that benefit the community and surrounding environment as a whole. While the case studies, resources, and opportunities highlighted in this guide offer only a glimpse of what's possible, they embody some of the best and most replicable practices in sustainable economic development today.

## About this Resource Guide

This Resource Guide is organized around the four challenge and opportunity areas outlined above. The purpose of the Guide is to compile and synthesize some of the most promising approaches to sustainable economic development in order to help local leaders in the Gulf Coast improve, accelerate, and scale up efforts to strengthen their communities.

Each case study in the Resource Guide defines a challenge that a particular community has faced, and then explores the processes, outcomes and practices, and lessons learned, that led to innovative solutions. Case studies were chosen for their demonstrated successes, replicability, and level of collaboration across government, non-profit, and private sectors.

The Resources and Opportunities section of the Guide provides lists of select programs that can help with technical assistance, research, and funding. While not a definitive sorting and ranking of resources, this section is intended to provide a targeted, short list of programs specific to the topics of Energy Efficiency and Renewable Energy, Resilience and Restoration, Federal Grants.

This Resource Guide is not an exhaustive compilation of information on sustainable economic development. Given the complexity of the issues and challenges—and the incredibly broad, diverse, and fast-moving scope of activity underway—comprehensiveness would be a quixotic quest. Rather, this Guide is a snapshot in time and will hopefully be a useful tool for making further progress in the region.





# Case Studies





## CASE STUDY: LOWER 9<sup>TH</sup> WARD, NEW ORLEANS

**Residential Energy Efficiency in the Lower 9**  
Nonprofits work together to help low-income residents save on energy bills.

### Background Information

In the wake of Hurricane Katrina, the Holy Cross neighborhood in New Orleans' Lower 9<sup>th</sup> Ward began developing its own recovery plan. The Holy Cross Neighborhood Association (HCNA)—overseen by the late Pam Dashiell, a champion of neighborhood development and sustainability—spearheaded the effort. Tulane University's Xavier Center for BioEnvironmental Research, the Louisiana Department of Natural Resources, and eminent planners Bob Berkibile, Bill Browning, and Bill Becker all contributed to the plan's development—as did the American arm of Green Cross International, Global Green USA—a testament to Dashiell and HCNA's ability to forge key partnerships. But the process was led by residents, and included extensive outreach, planning exercises, and needs assessments.

The resulting Sustainable Restoration Plan of Holy Cross & the Lower 9<sup>th</sup> Ward addressed four key areas: the built environment, the natural environment, the local economy, and quality of life. Soon after the plan's completion HCNA members realized the need for a separate entity in charge of implementing the steps laid out in the plan, and advocating on behalf of the entire community. In January 2007, it launched the Lower 9<sup>th</sup> Ward Center for Sustainable Engagement and Development (CSED), which has been working to implement the sustainability plan ever since.

### AT A GLANCE

**Status:**

- In-progress

**Lead organizations:**

- Lower 9<sup>th</sup> Ward Center for Sustainable Engagement and Development
- Global Green USA

**Timeline:**

- 2006 – Present

**Funding:**

- Individual donor
- Foundations
- Local & regional lending institutions

**Outcomes:**

- Comprehensive, neighborhood-scale sustainability plan
- Radiant barrier installation on more than 100 homes
- One-on-one energy assessments & customized weatherization
- Workforce development program

**Key Themes:**

- Residential energy efficiency
- Green building
- Sustainable recovery
- Community outreach
- Nonprofit partnerships
- Workforce Development

CSED is currently focusing on three major target areas: food security, including developing a network of backyard and community gardens and getting a grocery store into the community; coastal rehabilitation and resiliency, which includes restoring Bayou Bienvenue and reconnecting the residents to the water; and developing a more sustainable built environment, including residential energy efficiency programs.

At the same time that CSED was forming, dozens of organizations were pouring resources into New Orleans—and the devastated Lower 9<sup>th</sup> Ward in particular—especially in the area of sustainable rebuilding. CSED became the local community partner for many of these organizations because Holy Cross had developed its comprehensive plan—and through Dashiell’s tireless leadership. Among others, CSED began to work with The Sierra Club, Brad Pitt’s Make It Right Foundation, the New Orleans Food and Farm Network, Historic Green, and a number of Universities.

Global Green USA was another, and would soon become an important ally in the rebuilding process. Beth Galante, Director of Global Green’s New Orleans office, secured funding for a public green building resource center in downtown New Orleans, and began community outreach workshops in 2006.

But after two years, Galante says, “It became very apparent that we were missing the low-income, disadvantaged populations most in need of our services.” So CSED and Global Green began an informal partnership—Global Green’s first in New Orleans—in the Holy Cross neighborhood that would allow better access to neighborhood residents, and bring Global Green’s expertise to bear to help CSED accomplish some of its ambitious sustainability goals.

CSED and Global Green both provide residential energy efficiency programs that help reduce energy bills—a major expense in the Gulf Coast region, particularly among low-income residents. CSED started the process with a focus on weatherizing attics, including radiant barrier installation, attic insulation, and air sealing. CSED has found that these simple techniques are among the cheapest to provide, but deliver significant benefit in terms of both cost savings and comfort within the home. Global Green provides a more comprehensive energy audit to begin their efficiency work—including duct blasting and blower door tests—which it uses to identify potential energy savings and weatherization options.

The key is how both organizations have partnered to provide their clients with a complementary suite of programs, and have utilized one another’s strengths to have a greater impact. In addition to its own experience improving energy efficiency in the built environment, CSED has the local expertise to serve as a trusted neighborhood resource, and provide Global Green with a community entry point. Global Green’s greater pool of resources and its national network, meanwhile, allows them to offer additional services that CSED is currently unable to provide, furthering the restoration plan’s goal of achieving carbon neutrality in Holy Cross.



Together, the two organizations are able to support residents in the Lower 9<sup>th</sup> Ward to a much greater degree. “CSED provided a community voice from the very beginning,” says Camille Lopez, who manages Global Green’s Build It Back Green Program. “We know that we’re providing services the community is interested in.”

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## Process

**CSED Sustains.** The Sustainable Restoration Plan includes the ambitious goal of achieving carbon neutrality in the Lower 9<sup>th</sup> Ward by 2020. “Focusing on the existing built environment is how we can best make progress on this goal,” says Tracy Nelson, CSED’s Executive Director. “New construction to LEED standards is great for neighborhood infill, but the real energy reduction tool is bringing existing buildings to a higher standard of energy use.”

Incorporating efficiency strategies into an historic neighborhood can be a challenge, however. Many of these old homes were built using passive strategies and—especially in Louisiana’s hot climate—are extremely difficult to bring up to modern energy standards. Creating a balance between efficiency, historic preservation, and the desire of homeowners “requires a careful approach,” according to Nelson.

CSED’s win-win solution, called CSED Sustains, is to begin by weatherizing residential attics, including radiant barrier installation. This limits—almost entirely—the transfer of solar heat from the roof to the rest of the house. As CSED’s Resiliency Coordinator David Eber explains, radiant barrier is a simple and cost-effective solution. “Radiant barrier is cheap, it’s great in hot climates, and it’s easy to install so we don’t need highly trained individuals to do the work. It also makes sense in a rebuilding context, since it’s much harder to put in once houses are complete, so it was a great thing to start installing as people were coming back to Holy Cross.”



Workers install a radiant barrier in the attic of a Holy Cross neighborhood home as part of the CSED Sustains program. Photo: CSED

CSED offers a free assessment to determine how much radiant barrier will be needed, then partners with homeowners to pay for the upgrade. CSED covers all labor, and the homeowner is responsible for the cost of materials—typically around \$300—though CSED will also pay for materials if the homeowner is unable to do so.

Feedback from residents has been extremely positive, and installing a radiant barrier has proven to be a great starting point for energy efficiency among residents. In addition to lowering



energy bills—sometimes dramatically in the hot summer months—the radiant barrier also has an immediate effect on their physical comfort; the house feels cooler from the first day forward. Such a tangible and instantaneous benefit means people are more open to considering further efficiency upgrades.

“We know that residents need other things beyond radiant barrier to really achieve energy efficiency, says Eber. “But it shows them how a simple change can make a huge difference, so we can then say, ‘Hey, radiant barrier is just one thing you can do, and here are some other weatherization options,’” says Eber.

As the CSED Sustains program progresses and secures more funding, the organization has a long-term plan of both expanding the energy services they offer and increasing outreach within the community. The ultimate goal is to provide all residents of the Lower 9<sup>th</sup> Ward with efficiency upgrades, and to influence infrastructure decisions that reduce the neighborhood’s carbon footprint as part of the recovery process.

**Build It Back Green.** Global Green’s efficiency program, Build It Back Green, also provides home weatherization services, including comprehensive one-on-one energy audits, which generate a broad list of recommended efficiency upgrades. Some residents qualify for free materials and/or free installation of some of the recommended retrofits, if their income level is at or below 80% of the area median. The homes themselves must also be “weatherization ready,” says Lopez.

“We want these interventions to have measurable impact,” she says, “and small-scale weatherization won’t deliver much benefit if there’s a gaping hole in the house. We’re aiming for 15-20% energy efficiency improvement, so we select houses where we can achieve that. That way we use the before and after data to demonstrate to the neighbors and community that this is something they can do, and show the actual impact in terms of energy and dollar savings.”

Residents whose homes Global Green is not able to weatherize directly are referred to contractors knowledgeable in green building—many of whom Global Green has trained—or to other free networks in town that can do weatherization on a larger scale, such as the Weatherization Assistance Program.

But the program’s primary focus is on outreach and education for low-income residents trying to lower their energy bills. “Sustainability is often an affordability issue,” says Lopez. “We can bring our green building



A Global Green staff member meets with a homeowner to go over her energy retrofitting options. Photo: Global Green

expertise to the table, go out into communities and make that information relevant to homeowners so that they can take action and lower their bills.”

***Holy Cross Project.*** In Holy Cross, Global Green has made that education tangible through the creation of its Holy Cross Project. Working with CSED to build trust within the community—and furthering CSED’s carbon neutrality goal—Global Green sponsored an international competition in 2006 to design a net-zero energy affordable housing development. The winning design includes five single-family homes, an 18-unit apartment building, a community center that will double as green building resource center, and a bioswale that naturally filters stormwater runoff.

The project marked CSED’s first post-Katrina rebuilding partnership in the neighborhood. Global Green also brought Brad Pitt into the project at that time, first to act as a high profile judge of the design entries, to help Global Green and HCNA raise funds to construct the winning design. His experience engaging Lower 9th Ward residents through the Holy Cross Project inspired him to launch Make It Right, a further testament to the multiplier effect that strategic partnerships can have.

The five homes have already been completed. The first serves as a visitor’s center, which provides tours and demonstrates various green building features—including an advanced energy monitoring system that shows visitors their real-time energy consumption—for interested residents, contractors, and developers. The other four homes are being put up for sale—one has been sold already—at roughly \$150,000. Because the residents will save \$1200-\$2400 per year in utility bills, lower-income families are also able to qualify for mortgages that might otherwise have been unaffordable.

***Workforce Development.*** Local workers perform all aspects of CSED’s radiant barrier program, from the initial on-site energy assessment—program director Kathy Muse often accompanies the auditor to help residents understand the process and feel more at ease—to the actual installation. While CSED hopes to expand the program, and therefore hire more people from the community, the jobs they have provided are already staying local.

Global Green’s new NOLA WISE program would allow the organization to serve as a one-stop shop for the entire retrofitting process, from auditing through financing and installation. To accomplish this goal, Global Green must develop a network of auditors and contractors trained in green building, a process the necessarily includes green workforce development.

NOLA WISE has set aside a pool of funds for green building and weatherization training for local contractors. To ensure training is going to local people, Global Green uses its community partners—such as CSED—to help identify potential participants. Says Lopez, “We’re attaching this training to the weatherization work that we’re doing, so there will be jobs on the other side of the training. We already have two years of jobs lined up, and that doesn’t even include other weatherization programs in the area.”

***Partnering on community outreach.*** CSED has reached community members most effectively through word of mouth; some of the first residents to return to the neighborhood received radiant barrier, and their cool houses—and the program’s low cost—attracted their neighbors to the program. Other nonprofits refer clients looking to lower their energy bills to CSED, which has also experimented with canvassing the neighborhood, traditional advertising, and presentations at neighborhood meetings. Currently the organization is utilizing a network of block captains, who add even more local involvement in the efficiency process. “People can sign up to be the point person, so instead of having to canvas the neighborhood, we go through one person who tells their whole block,” says Eber.

Neighborhood associations and local organizations like HCNA and CSED are also valuable outreach partners for Global Green, which is larger in scale but lacks connection at the neighborhood scale. “We’ve found the relationship with neighborhood associations to be really valuable,” says Beth Galante. “They not only help host neighborhood events and meetings, but they bring in clients who they know are in need, and help us tweak the information to make it relevant to clientele in their communities. It ensures that we’re providing easily digestible information that’s really relevant to the people we’re trying to reach.”

The Build It Back Green initiative is allowing Global Green to expand its intensive outreach model to any neighborhood association that wants it; dozens of new areas in the city are therefore taking more concrete steps toward sustainability. But Global Green’s deep immersion in Holy Cross since 2006—made possible through the strategic partnership with HCNA and CSED—has helped the organization refine its community outreach approach, and been the catalyst for reaching New Orleans residents on a neighborhood scale.

Global Green also benefits from a strong celebrity network, and was able to recruit Brad Pitt to promote its green building resource center. “I was really skeptical at first, it just seemed frivolous when we had so many serious things we were trying to accomplish,” says Galante. “But he made me a believer, because every door opened, and suddenly thousands of people were open-minded, and more willing to learn and listen.”

***Funding strategies for efficiency upgrades.*** CSED’s efficiency work is currently funded by an anonymous donor, though the organization is seeking a more sustainable long-term funding strategy. The donor originally designated the money for elevated housing to protect against future flooding. It was a worthy goal, but CSED staff understood that they could use the money much more effectively to do energy efficiency work. “We explained to the donor that we would likely be able to complete just one or two elevated homes, but could reach hundreds of people if we used it for radiant barrier,” says Eber. “When we presented it that way, the donor got on board.”

Under the new NOLA WISE program, Global Green is beginning to work with local and regional lending institutions to put together loan packages for middle-income homeowners interested in making efficiency upgrades, but who don’t qualify for assistance.

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## Outcomes and Promising Practices

As of April 2011, CSED has installed radiant barrier on more than 100 homes in the Holy Cross neighborhood. The program's success means that there is a growing waiting list for residents who want the service.

Build It Back Green does a complete weatherization of one home per month, on average. More than 50 people have received comprehensive energy assessments in the past year, while another



Historic Green spring break volunteers stand with a Holy Cross homeowner in front of his newly weatherized house. Photo: CSED

200 have received one-on-one energy assistance. Through community workshops and outreach events, Global Green has reached literally thousands of people with information about energy efficiency and green building.

Volunteers are an important program resource. CSED partners with Historic Green to organize spring break projects using volunteers from around the country; eight homes were retrofitted with radiant barrier during the most recent spring break, and the partnership has served 20 homes in total.

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## Lessons Learned

***Gain trust by using existing community resources.*** Perhaps the biggest key to launching a successful program is gaining the trust of the community. In the Gulf Coast, where national groups and resources have not always proven themselves effective or sustainable, there is an understandable skepticism in many communities around new programs, particularly when an outside organization is leading them. As Global Green discovered, partnering with local organizations like CSED makes all the difference.

“You need to make your first impression an outstanding impression,” says Galante, “and use all the tools at your disposal to do that. If we come in by ourselves, there’s no particular reason to trust that we’re sincere and that we’re going to stay. So by partnering with trusted neighborhood organizations, we are immediately able to get a more receptive audience.”

***Aggressively seek new partnership opportunities.*** Staff at both CSED and Global Green point to their many partnerships as crucial to success. CSED’s Pam Dashiell had a unique ability to unite people—“she was just that kind of person, telling you about something but then giving you a task to work on and before you knew it you were involved,” remembers Eber—and the organization has benefitted tremendously from the connections she made. Similarly, as noted above, Global Green has been able to achieve much of its local success—from the Holy Cross Project, to more general community outreach on green building—by intentionally partnering with trusted local organizations. Dashiell was such a valuable friend and advocate of Global

Green's, in fact, that the organization renamed its visitor's center in her honor to mark the 5<sup>th</sup> anniversary of Katrina.

***Start small with something that makes sense in community context.*** Because resources were limited, CSED decided to begin its residential efficiency program with radiant barrier, the most cost-effective, context appropriate, and easy-to-install weatherization upgrade. Doing one thing, and doing it well, has allowed the organization to help hundreds of residents keep their homes cool and lower their energy bills. While larger organizations might be able to do more comprehensive work, taking on something simple to get started can be most effective on a small scale. No matter the scale, however, collecting data before and after the intervention is crucial. The data will demonstrate both energy and cost savings not only to other residents, but to funders as well. The more evidence pointing to success, the easier it is to grow a program.

***Help funders understand local needs; make the business case.*** CSED has been able to reach many more Holy Cross residents with radiant barrier than it would have with the elevated home strategy proposed by the anonymous donor. Making the decision to approach the funder about how the money could have greater impact was an important step, and the donor has proved willing to help. Local people and organizations are best equipped to determine community needs, and effective programs should drive funding, not vice-versa.

***Have the homeowner contribute where possible.*** Both CSED and Global Green expect homeowners to pay for materials if they have the ability to do so. This not only reduces program costs, but, more importantly, helps the homeowner become invested in the project. It's important to assist those without the means to pay, but allowing residents to cover some of the costs ensures that they have bought in to the upgrade, and makes the process more exciting and personal for them. Having paid for the first upgrade and seen the benefits, they will be more likely to continue investing in energy efficiency.

***The importance of sustainability planning.*** When it developed the sustainability plan for the neighborhood, HCNA lacked the resources and infrastructure necessary to achieve all of their ambitious goals. But doing the legwork to put a comprehensive plan in place has paid off. "Holy Cross was able to use that planning momentum to say, 'We're the group in the Lower 9<sup>th</sup> Ward that's out in front with our own plan,'" says Eber. "People who wanted to do work in the community understood that you can't do it without a good community partner. Because HCNA and then CSED were here and had the plan, other groups who wanted to do environmental work in the neighborhood came to us first. Having the plan allowed us to connect with Global Green, with Historic Green, and even Make It Right."

***Use whatever celebrity you have to get people in the door.*** Beth Galante is the first to admit that Global Green is fortunate to have a powerful celebrity network, but believes tapping into local VIPs can be just as effective. "Obviously getting a major star is not an option for everybody," she says. "But I'm always a big advocate for using any local celebrity in the community. Identify who's on that short list of people that the community respects and would be inclined to

listen to, and get them on board by whatever means necessary. Get them to be a spokesperson for what you're trying to accomplish."

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## For More Information

Sustainable Restoration Plan of Holy Cross/Lower 9th Ward:  
<http://davidrmacaulay.typepad.com/SustainableRestorationPlan.pdf>

Global Green's work in New Orleans:  
<http://www.globalgreen.org/neworleans>

Center for Sustainable Engagement and Development website (coming soon):  
<http://www.sustainthenine.org>

Holy Cross Neighborhood Association website:  
<http://www.helpholycross.org>

Contact:  
David Eber, CSED Resiliency Coordinator, (504) 307-5498 or [deber@sustainthenine.org](mailto:deber@sustainthenine.org).

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## Related Resources

### *Green Building Resource Center*

Global Green's downtown resource center has drawn thousands of interested community members, and is both simple and cost effective. The center includes about 50 12x12 boards with very easy to understand, basic, visually-compelling information about green building-related issues. People interested in a particular product or service can access supporting documentation, fact sheets on numerous products, and a green vendors guide.



A cross between a museum and a library, the information is explained simply to overcome the intimidation factor that often accompanies green building. Beth Galante believes that even a couple of these small kiosks can be extremely useful in generating interest in fledgling green building efforts and is something that other communities can easily develop, **even on a small scale.**



Photo: Pearl River Community College



## CASE STUDY: HATTIESBURG, MS

# Community College-Based Workforce Development

Pearl River Community College works with industry and government partners to rebuild, restore, and repower the Gulf Coast

### Background Information

Confronting hundreds of miles of decimated landscape left behind by Hurricane Katrina in 2005, Dr. Scott Alsobrooks, Director of the Woodall Technology Center at Pearl River Community College (PRCC), knew his community was essentially starting from scratch. But he remembers that he and his neighbors were not dismayed: “It’s a cultural thing; we’ve got a can-do attitude because we’ve got to take care of ourselves.”

*A small, aging local labor pool.* Post-Katrina, local construction companies came together to start rebuilding roads and putting utility and sewer lines back into the ground. They recognized the need to hire many hundreds of equipment operators, but the local labor pool lacked the capacity to fill those jobs.

In particular, the aging workforce was a source of concern—the average age of a utility transmission lineman was well over 50. As contracting companies flooded in from across North America, they needed a way to efficiently train and sustain a workforce to meet their post-disaster rebuilding challenges.

### AT A GLANCE

**Status:**

- In-progress

**Lead organization:**

- Pearl River Community College

**Participating organizations:**

- Huey Stockstill, Inc.
- Stion
- Forrest County & City of Hattiesburg

**Timeline:**

- 2011

**Funding:**

- Private contractors & equipment manufacturers
- National Science Foundation
- Local government
- U.S. Department of Labor

**Outcomes:**

- 350 certified workers
- Solar partnership will train 1,000 workers

**Key themes:**

- Workforce development
- Disaster recovery
- Community colleges
- Cross-sector collaboration
- Renewable energy

## Process

**Securing partnerships and funding.** In 2007 a local contractor, Huey Stockstill Inc., donated funds for PRCC to start a workforce training program for the construction and transportation industries. In support of the program, local retailers and their parent equipment manufacturing corporations—companies like John Deere, Caterpillar, Puckett Machinery Companies and



The Huey Stockstill Construction and Transportation Training Center is unveiled. Photo: Pearl River Community College

Stribling Equipment—donated equipment to the college. Meanwhile, the PRCC worked to secure educational funding from the National Science Foundation, which recognized the inherent value of enabling Pearl River to expand programming options available for local college-age youth, and invested in the model. Before long, Forrest County and the City of Hattiesburg joined the initiative, donating 22 acres of land to the community college to establish the state-of-the-art Huey Stockstill Construction and Transportation Training Center.

According to Dr. William Lewis, president of PRCC, “the great thing about this program is that it provides good-paying jobs in an industry that will be everlasting. What a difference it makes when business and industry, government and education work together. We couldn’t have done this without private help.”

Soon students were completing the short-term and highly successful certificate and degree programs, geared towards getting boots on the ground and helping local residents secure jobs in commercial trucking and construction projects to rebuild their community. A federal Department of Labor Pathways grant subsidized the cost of tuition for low-income students in the twelve-week degree programs.

The success of the workforce development programming came directly from the high level of business, contractor, and industry engagement that Dr. Alsobrooks was able to convene from the very beginning. He explains, “We created industry advisory councils for each of the equipment operating schools, including executive directors of local construction companies, workers, engineers, and people from manufacturing companies and dealerships, all depending on the needs of the program. We met regularly to develop curriculum, and talk about budget, timeline, and equipment needs. They functioned as strong advisory committees.”

“What a difference it makes when business and industry, government and education work together. We couldn’t have done this without private help.”

— Dr. William Lewis, Pearl River Community College President

The direct involvement of future employers in decision-making for the training curriculum made it easy for them to quickly assimilate program graduates into their ranks and move forward with important recovery work.

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## Outcomes and Promising Practices

**Practical education.** Approximately 350 students have completed certificate programs through the Stockstill Training Center. Very little of the academic experience takes place in a classroom setting at PRCC; students learn by doing, working mostly in the field from 8 a.m. to 5 p.m., and they leave the campus environment fully familiar with the day-to-day needs of their chosen career field. Dr. Alsobrooks estimates that at least three-quarters of graduates have stayed in the area and are currently employed by local companies, contractors, and utilities.

**Responding to the oil disaster.** After the Deepwater Horizon Oil Spill, PRCC partnered with the network of Mississippi Gulf Coast Community Colleges (MGCCC) to offer hazardous materials and oil spill clean-up training to students in all three Mississippi coastal counties, continuing its legacy of training a workforce to meet the real-time rebuilding and restoration needs of Gulf Coast communities. PRCC worked in partnership with BP to train approximately 1,000 people in Hazardous Material Handling and general safety, many of whom went on to work with BP contractors engaged in beach and vessel clean up.

**New solar partnership.** Today, PRCC is engaged in the early stages of a partnership with Stion, a California-based solar cell manufacturing company, to train up to 1,000 workers for positions in the newly emerging solar technologies field over the next five years. Stion is currently hiring a management team to oversee operations at its proposed Hattiesburg solar cell manufacturing plant which is scheduled to begin operations in the fall of 2011. PRCC's training program has begun offering its workforce development expertise by conducting pre-employment training assessments, which will help guide the hiring process. The first 100 workers will be hired by the end of 2011.



Workers trained at PRCC install utility lines. Photo: Pearl River Community College

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## Lessons Learned

**Engage employers early, and throughout the workforce development process.** Dr. Alsobrooks understands that much of PRCC's success in workforce development is due to the strong working relationships between the college and local industry leaders. "We had a network prior to Katrina; we knew these people and they knew us—we had a good relationship." Their involvement enabled PRCC's programs to be directly responsive to the needs of future employers and ensured that students found employment following completion of the degree. By maximizing the role of industry leaders in establishing curriculum programming, PRCC has also helped open the door for new industries to invest in the region, as evidenced by the budding partnership with Stion.

***Leverage existing resources to expand programming.*** By responding to the needs and opportunities that emerged from the Katrina disaster, PRCC now has \$4 million dollars invested in their workforce development program, including the Huey Stockstill Construction and Transportation Training Center that will “keep rocking and rolling for many years to come,” says Alsobrooks. “Katrina made us realize the need for workers with more skills than we had. We took local action to figure out what we needed and government was able to complement that. But even if they didn’t, we were going to do it anyway.”

***Succeed, then replicate.*** After its success in developing a strong workforce to meet the rebuilding and reconstruction needs created by Hurricane Katrina, PRCC moved aggressively to replicate its effective approach and when confronted with new needs and opportunities. The college helped build a local workforce to respond to and recover from the Deepwater Horizon oil disaster, and is now applying the model to the needs of the emerging solar power industry.

***Be strategic; use data.*** PRCC studied the impact of Hurricane Katrina (and later the oil catastrophe), and found a way to turn it into a local economic opportunity. Working closely with industry, the college saw an emerging disconnect between the large and time-sensitive need for well-trained workers to rebuild and restore Gulf Coast communities, and an aging, untrained local workforce. PRCC also used data to show the limitations of the workforce and the need to rebuild it, making the grant application to the National Science Foundation especially powerful. By collecting compelling evidence, local partners built a strong case for their programs – an important lesson for any grant seeker.

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## For More Information

Pearl River Community College website:  
<http://www.prcc.edu>

Contact:

Dr. Scott Alsobrooks, (601) 337-4645 or [scott.alsobrooks@gmail.com](mailto:scott.alsobrooks@gmail.com).  
Lee Bell, (601) 554-4647 or [lbell@prcc.edu](mailto:lbell@prcc.edu).

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## Related Resources

***Pearl River Community College Career & Technical Preparation***

<http://www.prcc.edu/techprep/index.html>

Pearl River Community College is a partner in the Mississippi Tech Prep Program, an innovative approach to high school, college, and career education that prepares young people for direct entry into the workforce or a continuation of further education through a combination of rigorous academic courses and high-level technical training.

***Stion***

<http://www.stion.com>

Stion combines state-of-the-art materials and device expertise with proven high-yield production processes to manufacture high-efficiency thin film solar panels at its U.S. headquarters in San Jose, CA. Stion is backed by leading venture investors with substantial experience in clean tech including Khosla Ventures, VentureTech Alliance, Lightspeed Venture Partners, Braemar Energy Ventures, and General Catalyst Partners.





## CASE STUDY: ST. LUCIE COUNTY, FLORIDA

### The Solar and Energy Loan Fund

Saving residents money while creating a new market for energy efficiency and renewable energy services

#### Background

St. Lucie County, on Florida's Atlantic coast, has a grand and ambitious sustainability vision. Recognizing the emerging and future market for renewable energy manufacturing and installation, the county has embarked on an integrated strategy that, if successful, would make it Florida's leader in establishing a green economy.

The list of St. Lucie's current and planned sustainability initiatives is striking, as is the broad array of cross-sector partnerships that are making the projects happen. Some of the highlights include:

- Developing a Green Collar Training Center in partnership with unions and nonprofits;
- Partnering with local colleges on green workforce development programs within a new, 65,000 square foot alternative energy demonstration and education center; and
- Working with the Oak Ridge National Laboratory and the City of Fort Pierce to develop a 1,600-acre "green district" of energy efficient homes, businesses, and public buildings. The district has already attracted attention from a number of green technology companies.

#### AT A GLANCE

**Status:**

- In-progress

**Lead organization:**

- Solar and Energy Loan Fund (SELF)

**Timeline:**

- Summer 2008 – Present

**Funding:**

- U.S. Department of Energy
- Florida Energy and Climate Commission
- Private lending institutions

**Outcomes:**

- 139 applications
- Access to \$20 million funding pool
- First loan completed

**Key themes:**

- Renewable energy
- Energy efficiency
- Revolving loan fund
- Federal grant award
- Cross-sector partnerships
- Community outreach
- Workforce development

County officials credit much of their success building networks and partnerships to former County Commissioner Doug Coward, who championed the idea of basing St. Lucie’s economic redevelopment on green services, research, and technologies, and who was largely responsible for establishing effective collaborations with major private and academic sector partners.

**Helping local residents.** But Coward and others also understood that recovering from the recession through the green sector couldn’t be achieved with only a top-down approach centered on attracting major businesses and research institutions. A true recovery would come from the bottom up, as well—by helping low- and moderate-income residents save money on their utility bills while creating the market for well-paying, local jobs in the growing energy efficiency and renewable energy industries.



The Solar and Energy Loan Fund (SELF) will help create affordable residential solar.  
Photo: St. Lucie County

So the county developed the idea of the Solar and Energy Loan Fund (SELF), a revolving pot of money that would help residents not only reduce energy use in their homes—through simple weatherization methods such as insulation and energy efficient windows—but also would promote the use of solar photovoltaic (PV) and solar thermal technologies, the most reliable and technologically viable sources of renewable energy in sunny Florida. The idea was to overcome the greatest barrier to large-scale adoption of home energy retrofit projects and residential solar technology: the high up-front costs.

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## Process

Local leaders decided from the earliest stages of program development that low-interest loans would be the best way to defray up-front costs of residential solar and energy efficiency. But St. Lucie County lacked both the legal authority and the practical financial expertise to be able to make the loans.

So they formed SELF as a separate, not-for-profit entity, and put it on a path to becoming certified by the U.S. Treasury Department as a Community Development Financial Institution (CDFI). CDFIs are mandated to close the lending gap for low- and moderate-income residents who typically struggle to obtain standard loans, and SELF saw the opportunity to expand the model to the green sector. Forming a nonprofit also allowed the funds to revolve, so that loan repayments could then be re-loaned, creating a sustainable program.

At the many community meetings and outreach events in which officials promoted the SELF concept, the program drew a lot of public support. People were interested in potential savings on their utility bills, which for many residents were as high as \$300 per month, especially in the summer. The low interest rate of 4% was also attractive, especially compared with the 18-19% interest rates that are typical of home renovation and improvement projects.

**Securing buy-in from local banks.** Forming a separate lending institution and having public support were important first steps, but would not be enough on their own; SELF needed to attract capital to be able to make the loans, and for that it needed buy-in from some of the local banks. Getting banks to the table is a difficult proposition, not least because energy efficiency and renewable energy loans are a relatively new business model, and the data demonstrating the business case for making these kinds of loans is limited. But St. Lucie County's commitment to developing a green economy—and the public support it had garnered around the idea—meant the local banks were more willing to get on board and be part of the shared community vision.

“It really depends on the appetite of individual lending institutions for making these types of loans, because there's not enough data to say ‘I'll get paid back at X percent’” says Sanjiv Doreswamy, SELF's Executive Director. “So the question is whether you have community buy-in to the point that banks want to be a part of it. It has to be more qualitative than quantitative at this point.”

But he also points to a more practical aspect for many banks as well: the Community Reinvestment Act (CRA). Under the CRA, banks have to lend a certain amount of their portfolio to underserved populations—SELF's target audience. “Investing in the fund actually allows banks to earn CRA credits,” says Doreswamy, “so depending on their credit rating and what they want to emphasize, this is an important potential target market for a lot of banks.”

Ultimately, says Glen Henderson, one of the program's architects, “we were able to get several banks who were eager to be part of this, and who provided letters of commitment and a willingness to invest in the future.”

**Federal grant award.** The financial commitment from local lenders, combined with what Henderson describes as “quite a bit” of community support, laid the groundwork for a strong grant application to the U.S. Department of Energy (DOE) that would provide SELF the initial capital to start the program.

In June 2010, the DOE awarded St. Lucie County a \$2.9 million Energy Efficiency and Conservation Block Grant (EECBG)—one of only 20 awarded competitively nationwide—of which \$1.6 million is to help get the SELF program off the ground. That money was supplemented with a \$300,000 grant from the Florida Energy and Climate Commission (FECC) targeted at defraying the costs of residential energy audits.

SELF is using the federal money to make the first loans, which will allow the organization to demonstrate its lending capability and complete the process of earning CDFI distinction. Once SELF is awarded CDFI status, it will have access to a committed pool of public and private monies—from financial partners including PNC, SunTrust, Oculina Banks, and IBM/PGA Credit Union—worth \$20 million.

DOE is also impressed with St. Lucie's use of its grant dollars, and has selected the program as one of two that it will highlight in a video for all of its grantees. The county will be able to use the video in its own marketing.

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## Outcomes and Promising Practices

***Application, audits, and the first SELF loan.*** Applications for the 4% interest loans have already begun rolling in. The average loan request is around \$8,000, and as of March, 2011, the program has received 139 application requests, and completed 27 energy audits—with 8 more scheduled—for residents who have already been approved for underwriting. There has also been some interest from commercial property owners, and SELF is considering expanding the program to serve the business community. Media exposure has helped drive many applications, and Doreswamy anticipates even more coming in when the local utility rolls out a solar installation credit in the coming months.

SELF is able to turn around applications and complete residential energy audits within 2-3 weeks, a benefit of being a private lending institution. The organization first does all the financial background work to ensure that they feel confident underwriting the loan. Then, once the loan is approved, SELF sets up a professional, one-on-one energy audit of the resident's home. "[The auditor] is out there for half the day in most cases, it's a really thorough check," Doreswamy says. Normally a \$300-\$600 process, the audit costs the homeowner just \$25 thanks to the FECC grant. He or she can then select from a suite of improvements that will be covered by the SELF loan.

The program celebrated its first successful loan in March, 2011, after 30 months of planning and community outreach. Maxima Mane, a Sam's Club greeter, needed a new air conditioning system for her home, but couldn't afford the 13-20% loans that other institutions were offering. So when she found out about SELF, she explains, "the minute I saw it, right away I called them." Her energy audit revealed a potential 40-50% savings on her energy bill.

***New business markets and job opportunities.*** In addition to helping low- and moderate-income residents save on their energy bills—the primary goal of the program—the loans to Ms. Mane and others are creating a new market for green products and services.

"The idea is that if we generate enough loans and enough work, then we also need workers to do that work," says Doreswamy. "Workers have to be qualified in energy efficiency, have the proper certifications, so workforce development programs are preparing people. That's the approach, and SELF is the conduit to do it."

St. Lucie's investment in a green economy means that it has a robust workforce development system in place. Indian River State College has an existing solar energy program that trains

workers in both PV and solar thermal technologies, while the Green Collar Task Force—a collaboration between St. Lucie County; the nonprofit, state-chartered WorkForce Solutions; and a consortium of eight trade unions—offers four-year apprenticeship programs.

The ultimate goal is to be able to attract larger clean energy employers and research institutions. Says Chris Dzadoovsky, current County Commissioner and President of SELF's board, "We can create a market where different companies—solar suppliers or tech groups—see a market unfolding and consider moving here. That's the long view."

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## Lessons Learned

***Securing partnerships and private financial commitments ahead of time can make the difference in winning a grant.*** St. Lucie County beat the odds to win the EECBG funding largely because of its ability to bring banks—and their capital—to the table as part of the grant application process. "They provided levels of interest and a willingness to invest in the future, says Henderson, one of the primary writers of St. Lucie's application. "That's what set the grant apart: the program wouldn't go away once the grant money ran out.

Getting banks on board is, of course, no small task. But if that obstacle—achieving a meaningful public-private partnership—can be hurdled, securing additional government funding becomes a much easier task.

***Use grant money to seed a sustainable program.*** A key to the SELF grant application was St. Lucie's decision to not simply sub-grant the federal dollars, but to form a separate, nonprofit lending institution that would distribute the money in the form of low-interest loans.

"If you just get a bucket of money and spend it you're not offering sustainability," says Henderson. "By setting up a separate entity, we are able to use the money many times over, and leverage public and private capital to greatly increase the program's scale."

***Be nimble and adaptive in the face of unexpected obstacles.*** The program hit a major snag in late 2010 when Fanny Mae and Freddie Mac filed suit against what is known as Property Assessed Clean Energy (PACE) financing, which essentially means allowing homeowners to attach clean energy loan payments to their property tax payments. St. Lucie had been confident in the PACE financing method, and had spent 8 months and \$40,000 to set up the taxing district to accommodate it. The national lawsuit made the PACE model a non-starter for mortgaged properties, at least for the time being, so SELF had to quickly adapt to the obstacle. "That was the biggest challenge, the PACE ground rules getting changed so late in the game," says Commissioner Dzadoovsky. "We had moved the idea forward with the understanding that PACE would be the best model, and had all the banks on board. So it was a major setback. But we had gotten so far along that we decided to continue with the process anyway and finish setting up the legal structure within the county."

SELF is therefore prepared to immediately go back to the PACE method if the lawsuit is resolved. In the meantime, however, several of the loan applications are for non-mortgaged residential properties, which can still be financed through the special tax district—as long as the loan is paid back in full when the property changes ownership. The county can also use the financing mechanism for commercial properties, which are not affected by the lawsuit, if and when the program expands to the commercial sector.

*The need for leadership and collaboration across sectors.* To be sure, generating the broad scope of projects that St. Lucie has managed takes a lot of people working together toward a common goal. But everyone agrees that Doug Coward's tireless work made the difference in getting the ball rolling.

“What helped in St. Lucie County was having Doug Coward as a crusader for the energy efficiency and solar movement,” says Commissioner Dzadovsky. “He really motivated people, from the workforce side to the financial institution side to the government side, and you need to have someone who really will motivate all aspects of the community. I can't emphasize it enough, you have to have a leader that will carry the torch.”



The South Florida chapter of the U.S. Green Building Council named Doug Coward the Most Outstanding Green Elected Official in 2010. Photo: TC Palm

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## For More Information

SELF website:

<http://www.stlucieco.gov/ed/empower.htm>

St. Lucie County Green Economy website:

[http://www.stlucieco.gov/ed/green\\_economy.htm](http://www.stlucieco.gov/ed/green_economy.htm)

Indian River State College solar energy program website:

<http://faculty.irsc.edu/dept/advancedtechnology/solar/index.html>

Green Collar Task Force website:

<http://www.greencollartf.org>

Contact:

Sanjiv Doreswamy, (772) 468-1818 or [sanjivd@solarenergyloanfund.org](mailto:sanjivd@solarenergyloanfund.org).

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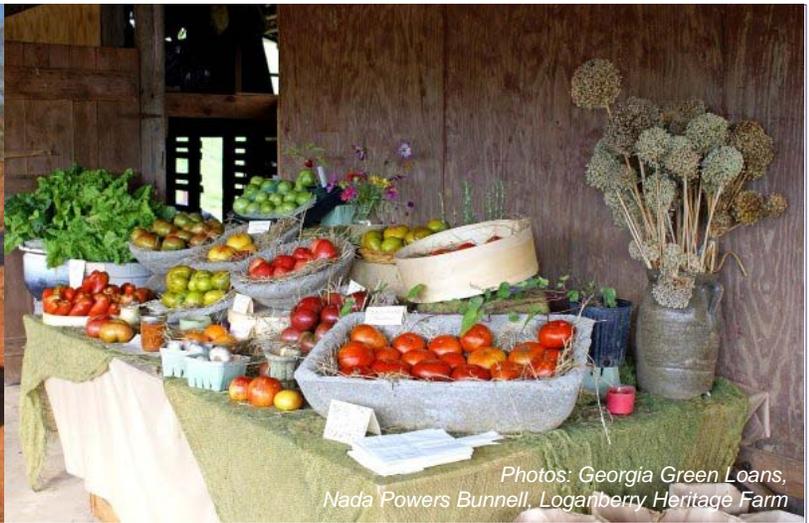
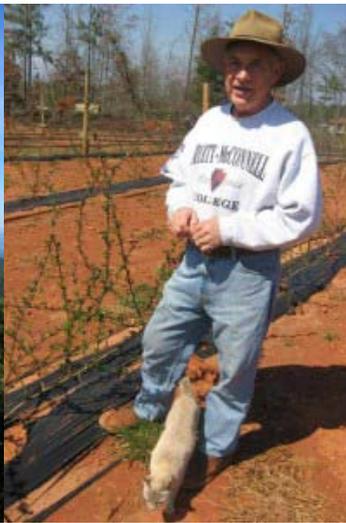
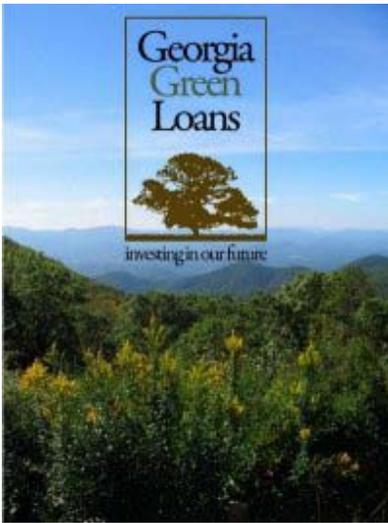
## Related Resources

### ***U.S. Department of the Treasury CDFI Fund***

<http://www.cdfifund.gov/>

The CDFI Fund was created for the purpose of promoting economic revitalization and community development through investment in and assistance to community development financial institutions (CDFIs). The CDFI Fund's mission is to expand the capacity of financial institutions to provide credit, capital, and financial services to underserved populations and communities in the U.S.





Photos: Georgia Green Loans, Nada Powers Bunnell, Loganberry Heritage Farm



## CASE STUDY: NORTHERN GEORGIA

### Georgia Green Loans

Creating economic opportunities by investing in energy efficiency and “green” entrepreneurs

#### Background Information

**Recognizing market potential.** In 2006, the staff of Access to Capital for Entrepreneurs (ACE), a small nonprofit lending institution in Georgia, noticed a trend within their lending portfolio: more and more small businesses were trying to break into the green economy by providing more environmentally-friendly products and services.

As a Community Development Financial Institution (CDFI) making low-interest loans, ACE’s mission was to serve small businesses — particularly micro-enterprises of around five employees or fewer — and staff wanted to support this new sustainability movement within the business community.

ACE’s CEO Grace Fricks decided to try an experiment. She and her staff conceived a program dubbed Georgia Green Loans, which would finance small business participation in the emerging green economy. In addition to ACE’s core missions of helping develop small businesses, Georgia Green Loans explicitly included positive environmental outcomes as part of its mission.

**Small loans, big goals.** The thinking was that small business providers — whose size allows them the flexibility to tailor information to their customers, and who can leverage professional expertise — are uniquely qualified to influence their own clients to incorporate

#### AT A GLANCE

**Status:**

- In-progress

**Lead organization:**

- Access to Capital for Entrepreneurs (ACE)

**Cooperating organizations:**

- Small Business Assistance Corporation
- Albany Community Together

**Timeline:**

- 2009 – Present

**Outcomes:**

- 60 loans for \$1.5 million
- Capability to make green loans throughout Georgia
- One-on-one technical assistance to three other organizations interested in green lending
- Network of green micro-enterprises

**Key themes:**

- Green business lending and development
- Energy efficiency

sustainable business practices. In other words, helping build the green economy from the ground up would create a multiplier effect, and reach a much wider circle of businesses, both small and large.

The first Georgia Green Loans went to micro-enterprises, either new green businesses or existing ones that wanted to add a green product or service to their operations. “A lot of companies wanted to dip their toes in the water and explore the potential of green services,” says Matt Ryder, Vice President of Programs at ACE. “Georgia Green Loans gave them the working capital to do it.” Early borrowers included a small architecture firm interested in doing EarthCraft building and design, a manufacturer of organic cotton baby clothes, and a lawn care company that wanted to give its customers the option to use eco-friendly lawn care products.

Dallas Gamble was an early borrower. His company did traditional building inspections, but Gamble saw a market to expand in the growing energy auditing field. He took the then-maximum \$35,000 loan to pay for new equipment and training for himself and his employees. “What started as an additional service grew enough that I was able to roll it into an entirely new business,” Gamble says. The new company, Green Summit Consulting, now has a successful residential and commercial energy auditing practice. It has done more than 350 weatherization audits for low-income residents in northern Georgia, has a growing commercial base, and is even expanding into specialized testing of federal government facilities.



Green Summit Consulting provides blower door testing as part of their energy auditing service. Photo: Green Summit Consulting.

*“Save & Sustain”*. Early rounds of the new program were successful, but Ryder and others at ACE recognized the need for a second line of loans. Beyond businesses looking to add explicitly green products and services, a huge market existed for companies—micro-enterprises as well as much larger businesses—that wished to make their operations more sustainable.

So Georgia Green Loans applied for and received a grant from the Georgia Environmental Finance Authority—distributing American Recovery and Reinvestment Act (ARRA) money—to launch the Save & Sustain program. Save & Sustain provides businesses with energy audits, and makes loans to cover the up-front costs of recommended weatherization, efficiency improvements, and other energy retrofits. Since the target audience is different from that of a basic Georgia Green Loan—say, for example, a box furniture store interested in doing a major lighting retrofit—Save & Sustain loans tend to be quite a bit larger.

“Beyond our typical micro-enterprises, now we’re reaching larger enterprises, companies that might take in \$10 million top line, so they’re making bigger investments,” says Ryder. “Making

these types of loans not only has a positive impact in terms of reducing energy footprints, but also expands the market for green services.”

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## Process

**Addressing the data challenge.** Financial institutions are often reluctant to delve into the green market. A major barrier is the lack of data proving the profitability of green loans. Although ACE’s distinction as a non-profit CDFI means that profit margin is less of an issue, staff still needed to be sure when crafting the program that it wouldn’t represent too much financial risk.

In 2006, during the conceptual stages of Georgia Green Loans, ACE engaged in a partnership with Emory University’s Goizueta Business School, which performs pro bono business consulting to non-profits as part of its curriculum. The six-month project—“it probably would have been a \$100,000 consulting gig in the for-profit world,” says Ryder—looked at the financial feasibility of starting a green lending program: What is the demand for green capital? What is the default risk of lending to green businesses compared with traditional ones? What is the inherent risk of positioning oneself as a lender in the green economy relative to the general economy?

The study found that the demand for green lending services in Georgia was not only real, but actually outpacing that of the regular economy. It wasn’t that lending to eco-friendly businesses was less risky on a case-by-case basis; the risk indicators were actually similar regardless of the kind of business doing the borrowing. But because so many financial institutions have long been disinclined to provide loans for green businesses, there was an ever-growing—yet underfunded—market of potential green businesses. This information was crucial to ACE’s decision to take the chance with Georgia Green Loans.

**Same source of capital; different technical assistance.** Georgia Green Loans officially launched in 2009. Because ACE was already an established lender with an existing pool of resources, it could simply reappropriate some of its capital to make the green loans, rather than having to secure new funds to start the program. Utilizing existing resources allowed ACE to bypass the challenge of scrambling for new monies, a major hurdle to many start-up financing programs.

But while the funding source and low, CDFI interest rates were the same for both traditional and green loans, the technical assistance that came with the green loans looked different. “A big part of ACE’s mission is not just to provide monetary capital but to provide intellectual capital, political capital—anything possible to help businesses grow,” explains Ryder. “With green loans, that assistance takes a different form than with regular CDFI programs.” Borrowers

“A big part of ACE’s mission is not just to provide monetary capital but to provide intellectual capital, political capital—anything possible to help businesses grow.”

— Matt Ryder  
Vice President of Programs, ACE

have access to a network of resources, ranging from energy research centers to partnership opportunities to business mentors.

One example was assistance to a small start-up company called Watts On Your Roof, which received a low-interest green loan to grow its residential and small commercial solar installation. The company was having some trouble marketing to buyers interested in renewables, an atypical target audience. So Georgia Green Loans connected Watts On Your Roof to another borrower that had had success marketing environmentally-friendly products. The established business acted as a mentor, sharing what it had learned about reaching the more niche audience.

*Expanding reach and impact through partnerships.* When ACE began Georgia Green Loans in 2009, its micro-lending authority covered 34 counties in northern Georgia—a large area, to be sure, but still limited compared with the demand in the state. So staff reached out to two other lenders in the state that covered other parts Georgia: the Small Business Assistance Corporation in Savannah, and Albany Community Together in Albany.

At the same time, ACE submitted an application to SBA to expand its micro-lending authority to the middle section of Georgia. As a result, ACE doubled its lending authority to 68 counties, and the partnerships with the other two organizations means that green loans can be provided in every single Georgia county.

The CEOs of all three organizations work together to raise capital for the program, and meet regularly to tackle joint challenges. The Georgia Green Loans website serves as a common platform through which all prospective businesses can apply for loans, and has a system in place that automatically directs the customer to the appropriate lending organizations based on its home county.

Georgia Green Loans is also partnering with the federal government to help provide larger loans than the small CDFIs can afford. ACE has a long-standing relationship with the U.S. Department of Agriculture (USDA); before USDA mobilized its own financial services programs, ACE provided many loans for its rural and agricultural small business clients, loans that USDA now makes itself.

One of USDA's current initiatives is called the Rural Energy for America Program (REAP). REAP and the Save & Sustain programs have a lot of overlap in terms of the size and kind of businesses to which they can loan, but REAP has a far higher ceiling—tens of millions of dollars—on the size of its loans. Georgia Green Loans has run across a number of projects it couldn't reasonably afford to finance, and through ACE's existing relationship with USDA, was able to refer those clients to REAP.



“It’s actually a little bit better for some businesses,” says Ryder, “because if they meet certain qualifications the funding becomes a rebate instead of a loan. So they can sometimes get their projects partially or even fully funded, rather than taking the projects on as debt.”

**Demand-side financing.** As successful as Save & Sustain has been, ACE is conscious of staying true to its core mission of helping the very small and micro-enterprises develop and succeed. Unfortunately, says Ryder, even as a CDFI “there are a lot of loans that we want to make but just can’t. The businesses may not have sufficient cash flow yet, no collateral, or maybe their credit isn’t good enough. But we still want to help them.”

So Georgia Green Loans has come up with an innovative strategy that utilizes the success of its Save & Sustain program to get more capital to these small businesses—not through a loan, but through additional revenue. Ryder calls it demand-side financing, and the concept is brilliant in its simplicity: match the products and services of green micro-enterprises with the larger businesses receiving the Save & Sustain loans. The larger loans are less risky for ACE, yet generate added business—and the money that comes with it—for the green micro-enterprises. Their business grows through greater demand for their services, and they aren’t saddled with debt.

Take, for example, a small commercial energy auditor firm looking to expand her business. Even if she can’t get a loan herself, she can become part of the Georgia Green Loans network, which means she can market low-interest financing and a 75% subsidized energy audit to any prospective client. The cheap money and cheap audit she brings to the table make the project much more feasible for the larger company. “The auditor has benefitted because their customer is more willing to have an audit done knowing that 3% money is available; that customer will be able to afford the recommendations,” says Ryder.

The Georgia Green Loan network also includes pre-approved small businesses to implement these recommendations—efficient window installers, for example—who have a proven track record of quality work and experience complying with ARRA-funded project requirements. Now a single green loan has achieved a reduction in energy use for a larger business, *and* has generated revenue for two micro-enterprises, whether or not they were able to receive their own loans.

“The auditor has benefitted because their customer is more willing to have an audit done knowing that 3% money is available; that customer will be able to afford the recommendations.”

— Matt Ryder

Green Summit Consulting is one of about 20 small businesses—auditors, lighting and HVAC installers, etc.—that have benefitted from being part of the network. “Save & Sustain help jump-start the commercial side of our energy efficiency work,” says Dallas Gamble. “3% financing is very attractive in this economy...about half of our commercial clients have come to us through

the Georgia Green Loans program.” That work has represented more than \$20,000 in marginal revenue for Green Summit Consulting—money that never has to be repaid.

**Advisory Council.** Georgia Green Loans formed an Advisory Council when it launched in 2009, as was very intentional about courting a diverse group of leaders representing various stakeholder groups. This ensures that the program remains not only financially viable, but sticks to its core environmental and small business development mission. The Council includes representatives from ACE’s own board; the private sector, including Georgia Green Loan recipients; larger, for-profit financial institutions; private foundations; the Atlanta Development Authority; and representatives from the environmental sector, such as organic food producers.

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## Outcomes and Promising Practices

**Portfolio to date.** In 2009, the first year of operation, Georgia Green Loans provided \$377,756 to 16 businesses. As of March 2010, it has increased its lending portfolio to more than 60 loans, totaling roughly \$1.5 million. The typical loan size varies depending on whether it’s a CDFI-type loan to a micro-enterprise, or a larger loan under the Save & Sustain umbrella. Ryder estimates the average micro-enterprise loan to be roughly \$15,000, while the Save & Sustain loans tend to be closer to \$60,000.

**Producing a replicable model.** Replicability is an explicit goal of the Georgia Green Loans program, and staff believe they can help other institutions develop and grow their own eco-friendly lending programs by helping pinpoint some of the keys to success, such as attracting in-state and federal partners, for example.



Emil Bekyarov, owner of B Green Services, approached Georgia Green Loans for financial assistance to expand his recycling business. *Photo credit: Georgia Green Loans.*

Georgia Green Loans staff understand that a lack of substantial evidence proving the long-term return on investment is perhaps the single largest barrier to successfully launching green lending programs. So data is a major focus of every Georgia Green Loan. Staff carefully collect both financial as well as environmental impact data—reductions in water and energy use, materials removed from the waste stream, air and water pollutants eliminated, and renewable energy generated—to demonstrate in concrete terms the benefits these loans provide. They are hopeful that this data will be enough to convince lenders in other parts of the country to replicate the Georgia Green Loans model.

**Green Academy.** In 2010, Georgia Green Loans received a PRIME grant from the U.S. Small Business Administration to create a national Academy for Green Micro-Enterprise Development, known simply as the Green Academy. The Academy has so far provided one-on-one technical assistance to organizations in Detroit, New Orleans, and Spokane, WA. “We help

them create an entire green program plan: organizational readiness, finding a target market, creating a marketing and outreach plan, securing partnerships and designing materials,” says Liz Penney, who leads the Green Academy effort.

In addition to targeted technical assistance, the Green Academy is also reaching hundreds of organizations across the country through a five-part webinar series covering various aspects of green program development.

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## Lessons Learned

***Utilize existing financial and technical resources, where possible.*** One of the reasons for Georgia Green Loans’ rapid success is that it tapped into already available resources to begin the program, rather than trying to build it completely from scratch. Other communities interested in finding ways to develop small, eco-friendly businesses should consider reaching out to existing financial institutions and small business assistance providers. Once pilot projects demonstrate success, they can then be more substantially funded through government and private monies.

***Pair financial support with technical assistance.*** An injection of cash is nice, but is more effective when paired with a tailored system of support. Providing access to relevant business networks, experts in the field, advocacy support, and political capital will ensure that every dollar is spent more effectively. Even if financial support proves to be unfeasible—as has been the case with some of the small businesses in the Georgia Green Loans network—there may be creative ways to connect your target audience with other critical resources.

***Partnerships—within and across sectors—are key.*** In the case of Georgia Green Loans, developing working partnerships within the small-business lending arena has allowed the program to expand across the state quickly, generating substantially more business for ACE. And in working with the USDA and GEFA, the program has also helped potential borrowers from the very small to the very large receive financing, something that ACE could not have achieved on its own.

***Engage a diversity of stakeholders.*** Whether your constituency consists of average citizens or major corporations, government institutions or community-based nonprofits, engaging all relevant stakeholders will help achieve buy-in across sectors, develop the partnerships that make a program successful, and ensure that everyone’s goals and concerns are being consistently addressed. Convening an Advisory Council is just one way to achieve this engagement, but has been very successful in the case of Georgia Green Loans.

***Sustainability is good for business.*** ACE used Georgia Green Loans and some of its partnerships to double the lending authority it enjoys from 34 to 68 counties. As the economy continues to develop markets for sustainable products and services, leading the way in

providing them looks to be a shrewd move not just for community health and resilience, but also financially.

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## For More Information

Georgia Green Loans website:

<http://www.georgiagreenloans.org>

Green Summit Consulting website:

<http://www.greensummitconsulting.com>

Contact:

Matt Ryder, Vice President of Programs, ACE

(404) 863-3510 or [ryder@georgiagreenloans.org](mailto:ryder@georgiagreenloans.org).

Liz Penney, Director of Community Outreach, ACE

(770) 718-8992 or [penney@georgiagreenloans.org](mailto:penney@georgiagreenloans.org).

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## Related Resources

### *Green Academy Webinars*

<http://www.georgiagreenloans.org/index.php?go=green>

A series of online webinars that address some specifics of green lending programs and the needs of green micro-enterprises. Contact Jason Friedman ([jasonj@friedmanassociates.net](mailto:jasonj@friedmanassociates.net)) to learn about upcoming webinars.

### *U.S. Department of Agriculture Rural Energy for America Program (REAP)*

<http://www.rurdev.usda.gov/tn/REAP.html>

REAP grants and loan guarantees help rural businesses and agricultural producers, to purchase and install renewable energy systems or make energy efficiency improvements. Rural businesses, farmers, ranchers and other agricultural producers are eligible to apply. Businesses must meet the Small Business Administration definition of a small business. Agricultural producers must derive at least 50% of their gross annual income from agricultural operations.

### *Green Entrepreneur's Toolkit*

<http://www.businesscreditcards.com/bootstrapper/the-green-entrepreneurs-toolbox-100-networking-resources-guides-and-links/>

Some of the top funding, news, and networking resources dedicated to green entrepreneurs, compiled by the Bootstrapper blog. This list accompanied one of the Green Academy webinars.



### ***Green Business Resources***

<http://www.georgiagreenloans.org/index.php?go=green>

A collection of resources to help green businesses, including funding sources, research and publications, and a sustainable office toolkit. While some of the information is specific to Georgia, most can be applied to any context, particularly in the Southeast.

### ***EarthCraft***

<http://www.earthcraft.org/>

Established in 1999 by the Greater Atlanta Home Builders Association and Southface, EarthCraft is a green building certification program that serves Georgia, Virginia, Tennessee, Alabama, South Carolina and North Carolina. By addressing the factors that impact homes in this region, including high heat, humidity and temperature swings, EarthCraft serves as a blueprint for energy, water and resource-efficient single-family homes, multifamily structures, renovation projects, community developments and light-commercial buildings. To date, more than 13,000 EarthCraft homes, multifamily units and commercial buildings have been certified.





Photo: City of Lakeland



## CASE STUDY: LAKELAND, FLORIDA

# Regenesis Solar Hot Water Service

Adopting low-cost renewable energy and providing sustainable job opportunities

### Background Information

Solar thermal technology—which uses the sun’s energy to heat water in homes—can significantly lower energy bills and yield an attractive return on investment. At the same time, local governments utilities are increasingly looking for ways to increase renewable energy capacity to meet Renewable Portfolio Standard (RPS) mandates—which require a minimum supply of renewable energy to the electrical grid—without without significantly raising rates.

Realizing these benefits to consumers, utility companies and municipal agencies alike, Regenesis Power, Inc. is deploying large-scale, domestic solar thermal programs across the country, and has established a strong regional program in Lakeland, Florida.

The four primary objectives of the program are to:

- Establish mass-distributed solar thermal programs that result in long-term diversification of the energy supply;
- Provide easy and affordable ways for family households to reduce their utility bills;
- Enable local communities to generate local energy, generate local jobs and support the US renewable energy manufacturing sector; and

### AT A GLANCE

**Status:**

- In progress

**Lead organization:**

- Regenesis Power, Inc.

**Primary Client Organization:**

- Lakeland Electric

**Timeline:**

- Installation within 90 days after partners & customer agreements

**Funding:**

- None necessary, although grants/incentives helpful

**Outcomes:**

- 60 systems installed
- Projected 6,000-10,000 installations in five years
- Soon to be replicated in several locations nationwide

**Key themes:**

- Renewable energy
- Workforce development
- Job creation
- Cross-sector collaboration

- Utilize a business model that provides scalable investment value to the organizations and communities that the solar thermal programs serve.

**Power purchase agreements with utilities and government agencies.** Hot water is a primary energy cost in most U.S. households, yet less than 2% of single family homes take advantage of solar thermal technology—due in large part to relatively high up-front investment costs. To address this barrier, Regenesis has adopted a power purchase agreement model. They install rooftop solar thermal panels at no cost to the consumer, then provide a 20-year contract with a flat monthly rate for hot water consumption. The model removes entry costs for consumers, while helping to hedge against variable energy rates.

**Lakeland, Florida.** The Lakeland Electric Solar Hot Water (SWH) service program is the first of its kind in the nation and is generating significant interest with utility companies, municipal agencies, and the renewable energy sector. The pilot for the business model was 11 years in the making, has been reviewed by internationally recognized financial and engineering firms.



Workers install a solar thermal rooftop panel.  
Photo: Regenesis Power

In 2000, the utility Lakeland Electric was awarded a grant to initiate a pilot program that installed 10 solar hot water systems in residential homes. Dell Jones, now working with Regenesis, supplied the equipment.

After expanding the pilot phase to 60 homes, Regenesis and Lakeland Electric agreed to a long-term Solar Thermal Purchase Agreement in 2009, and they are now providing residents with free installation and maintenance of 80-gallon solar water systems, for a monthly fee of \$35 under a 20-year contract. The City of

Lakeland, the electric utility, and Regenesis signed a 20-year service agreement in late 2010 and began installation soon thereafter.

The unique SHW program has proven to be effective in providing communities and homeowners with a fast, efficient way to implement solar energy. The model leverages the cost efficiencies of solar thermal energy generation, together with the long-term value and investment return of mass-distributed renewable energy, to create an easy and effective solar program. This provides long-term benefits to regional economies through new job creation, long-term revenue streams, a diversified energy portfolio, and positive environmental impacts for future generations.

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## Process

**Securing utility/municipality and customer agreements.** Regenesis' first step is to implement a Solar Thermal Purchase Agreement (STEPA) with its partners. The Agreement forms the basis for a long-term service contract between Regenesis and the utility or municipal agency—

Lakeland Electric in this case. A separate Solar Service Agreement (SSA) defining terms of service is contracted with the individual customers. To avoid high operational costs, Regenesis then utilizes its partners' and customers' existing billing system by adding the solar thermal purchase as a line item.

### ***Financing.***

Regenesis provides the financial structure for their programs and operations and works with its partners to offer the lowest possible monthly cost to homeowners. Often, programs are subsidized through local grants—as was the case in Lakeland—or other incentives.

Common grant sources include the Community Development Financial Institutions (CDFI) Fund, job creation grants, utilities interested in equity ownership of the operating company, or high wealth individuals interested in community investment in low-risk technology and cash flow streams.

***Market partners.*** In addition to its traditional utility partners, Regenesis has also engaged housing authorities, and other municipal governments or agencies that have an interest in offering their customers an easily adoptable, cost effective renewable energy choice. Ideal partners are usually one of the following:

- A company with the ability to bill customers on a monthly basis;
- A municipal government with an interest in creating clean, renewable energy jobs;
- An electric utility with a green power goal or commitment; or
- A water utility interested in new revenue without substantial capital investment, or one interested in starting a green business division.

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## Outcomes and Promising Practices

***Going quickly to scale.*** Once the agreements are in place, installations can begin in as little as 90 days. A solar collector is installed on the south facing part of the customer's roof and connected to a new 80-gallon hot water tank. In Lakeland—a city of approximately 120,000 household—Regenesis anticipates being able to install 6,000-10,000 solar thermal systems with a total capacity of 16-28 Megawatts of thermal energy in five years. Estimates for adoption of the service are based on the current costs of energy; federal, local and other incentives for solar; and an inventory of building roof space that receives direct sunlight.

The monthly SWH service fee through Lakeland Electric is \$34.95, which replaces the cost of electricity used for conventional water heating. Families of four or more who use average amounts of hot water will likely start saving money right away with the SWH program. There are no other fees beyond the flat monthly fee, which is locked in for 20 years—future owners of the home can also continue the service at the original rate. As energy costs are projected to increase, subscribers are likely to achieve significant cost savings over the term of the agreement.

“We are very pleased that Lakeland Electric is leading the way in mass-distributed renewable energy generation,” says Jim Stanfield, Lakeland Electric’s General Manager. “In addition to having an impact on long-term electricity demand, the new service will generate jobs and support our regional economy.”

***Developing not just jobs, but careers.*** By entering into long-term contracts, the SHW program generates long-term jobs in the solar service industry. Regenes Power currently offers the job training, through which solar technicians can be tested, certified, and nationally recognized through the North American Board of Certified Energy Practitioners (NABCEP)—an important credential for the growing renewable energy workforce.



The emerging solar thermal field is projected to be a major creator of jobs in the coming years. Photo: Regenes Power

Training plumbers, roofers, or electricians in solar thermal energy installation provides the under-employed with a valuable skill set in an emerging field, and the 20-year agreements mitigate some of the volatility and uncertainty recently seen in fields like construction.

***SHW and beyond.*** The SHW program will be offered to business and residential customers. Regenes also offers a complementary Smart Energy Home program, which provides homeowners with energy efficiency upgrades, further reducing energy use and utility bills. Smart Energy Home includes the most needed and cost-effective services like weather stripping, CFL or LED lighting, cleaning refrigerator coils, repairing duct leaks, cleaning filters, and other services with short payback periods of days and months.

***The long view.*** Through the implementation of regional SHW and weatherization programs, Regenes is already generating new local jobs over a multi-year period. Mass-distributed solar hot water programs, together with U.S. domestic equipment manufacturing, support long-term, durable employment opportunities, particularly in system installation and maintenance.

***2011 operational expansion.*** Regenes plans to continue its operational expansion of Solar Hot Water Service within the central Florida region and in states with existing energy initiatives. The company is currently in discussions with 15+ communities from New Mexico to Wisconsin to Florida about its Solar Hot Water Heater program, and with an expectation of interest growing to a national level. For example:

- Charlotte County, FL has studied the Lakeland program and currently has plans to launch a similar initiative in 2011. The Charlotte County program can be run out of the county’s municipal water service.

- Regensis won the RFI and RFP that the Wisconsin State Department of Administration sent out regarding renewable energy for all state buildings. Regensis is under contract to evaluate the State owned buildings, and where feasible, provide solar hot water at an indexed rate equal to 90% of current costs.

*Written by Amanda Mason, Clean Economy Development Center.*

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## For More Information

Contact: Dell Jones, Vice President of Renewable Project Development, Regensis  
(904) 891-3355, or [d.jones@regensp.com](mailto:d.jones@regensp.com).

Regensis website:  
[www.regensp.com](http://www.regensp.com)

Lakeland's Solar Hot Water Service website:  
[www.solarlakeland.com](http://www.solarlakeland.com)

Lakeland Electric SWH Program page:  
[www.lakelandelectric.com/Residential/EnergyEfficiencyProductsServices/SolarWaterHeatingProgram/tabid/360/Default.aspx](http://www.lakelandelectric.com/Residential/EnergyEfficiencyProductsServices/SolarWaterHeatingProgram/tabid/360/Default.aspx)



Artist conception of a restored Bayou Auguste. Image: GCCDS



## CASE STUDY: EAST BILOXI, MS

# Bayou Auguste Urban Restoration Project

Restoring a degraded bayou into a natural, park-like public amenity

## Background Information

*A critical, yet diminishing natural resource.* Bayous are wetland streams in flat, low-lying areas with slow-moving water. Common to the Mississippi River delta, they serve important ecological functions, including water purification, providing biodiversity vital to healthy fisheries, and buffering against storm surges and erosion.

Unfortunately, many bayous in the Gulf Coast are subject to infill development and neglect, and have been disappearing at a rate of one football field every 15 minutes. This rapid deterioration has led to significant loss of wildlife habitat, resulting in fisheries income losses that are expected to reach \$40 billion by 2050.

The Bayou Auguste in East Biloxi, MS, has been no exception. Running west from the Back Bay of Biloxi through a residential neighborhood, the bayou has experienced years of debris pile-up and pollution. Often seen as a blight on the landscape rather than a celebrated natural resource, the bayou has been significantly narrowed, and largely forgotten. As Britton Jones, a Landscape Architect at the Gulf Coast Community Design Studio (GCCDS) puts it, "It's not much of a public amenity, despite being in an urban setting surrounded by residential communities. It's a big ditch—that's how it's viewed; most people just want to stay away."

*Celebrating natural assets.* Recognizing the lost value of the Bayou Auguste, and the need to raise awareness in the local community,

## AT A GLANCE

### Status:

- In-progress

### Lead organization:

- Gulf Coast Community Design Studio

### Participating organizations:

- Biloxi Housing Authority
- Biloxi Public Schools
- City of Biloxi
- Land Trust for Mississippi Coastal Plain

### Timeline:

- Fall 2008 – Summer 2011

### Funding:

- Five Star Restoration
- Fish America Foundation
- Gulf of Mexico Community-based Restoration Partnership

### Outcomes:

- 7.5 acres of restored bayou
- Public park space
- Revived habitat and improved fisheries

### Key themes:

- Community-based ecological restoration
- Community visioning
- Environmental education
- Cross-sector partnerships

GCCDS has embarked on an ambitious community-based bayou restoration project. The project is expected to generate several co-benefits, including neighborhood beautification, increased protection from storm surges,<sup>1</sup> and development of an educational asset. From the outset, GCCDS partnered with local public institutions—including a local elementary school—and engaged the community in a series of design forums and clean-up efforts. Today, the project is acquiring permits to start construction on a series of restoration activities, including expanded wetlands, viewing decks, walking trails, and other park-like amenities.

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## Process

**Natural Allies.** Early on in the project's conception, GCCDS partnered with two natural allies: the Biloxi Housing Authority (BHA), one of the main property owners in the area, and the Nichols Elementary School, which saw the project as a perfect opportunity to expand its curriculum with real-world, hands-on activities.

In recognition of the project's education potential, the three partners first considered applying for an environmental education grant. However, the complicated application process and quickly-approaching deadline meant the team had to look elsewhere, and expand their options for start-up funds. In late 2009, they applied instead for a National Fish and Wildlife Foundation Five Star Restoration Grant, which required a set of five community partners. The City of Biloxi and the Land Trust for Mississippi Coastal Plains (LTMCP) were clear choices, given the alignment of the project to their respective missions. The grant, along with matching funds from the BHA, the City of Biloxi, and the LTMCP totaled approximately \$70,000. These funds were put to use to sponsor community visioning meetings, and to hire project staff to manage planning and permitting activities.

**Educational connections.** The grant also funded an outdoor environmental education



High school students helped monitor the bayou's water quality, wildlife, and native vs. invasive species. *Photo: GCCDS*

afterschool program at the Nichols Elementary School, which covered concepts of ecology, morphology, wildlife biology and hydrology. Students also participated in a stencil art project, showcasing wetland species and coining anti-pollution slogans. On May 17<sup>th</sup>, 2010, the stencils were painted onto a bridge crossing Bayou Auguste, and onto storm drains throughout the neighborhood.

Staff at the GCCDS then engaged area middle and high school science teachers to integrate Bayou Auguste-based environmental education into the curriculum. Students conducted baseline monitoring activities and collected

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<sup>1</sup>According to a June 2010 report by Earth Economics, a single acre of wetland can soak up to one million gallons of flood waters and 3.4 miles of wetland can reduce storm surge by up to a foot. Source: [http://www.eartheconomics.org/FileLibrary/file/Reports/Louisiana/Earth\\_Economics\\_Report\\_on\\_the\\_Mississippi\\_River\\_Delta\\_compressed.pdf](http://www.eartheconomics.org/FileLibrary/file/Reports/Louisiana/Earth_Economics_Report_on_the_Mississippi_River_Delta_compressed.pdf)

data on water quality, wildlife counts, and invasive and native species cover. In exchange for the educational benefits, the project team also benefited from the students engagement. Members of the high school “Envirothon” team volunteered for invasive species removal and botany students even started collecting and growing native marsh grasses and perennials, which will be used to help expand and restore wetlands in the summer of 2011.

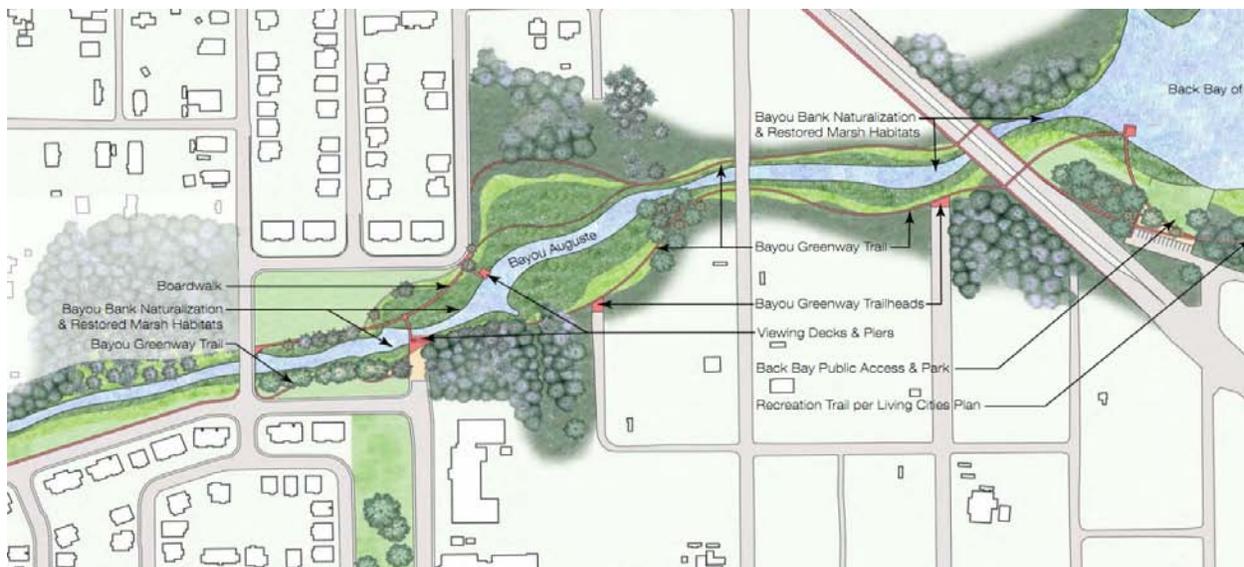
**Leveraging cross-sector partnerships.** The City of Biloxi, recognizing the importance of the project, has committed in-house resources—staff time and machinery from the public works department—to help with implementation. This added level of cross-sector collaboration helped to secure additional funds from the Fish America Foundation and the Gulf of Mexico Community-based Restoration Partnership, which will fund the restoration work.

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## Outcomes and Promising Practices

**The fruits of volunteerism.** Since 2009 date, the five-way partnership has engaged approximately 80 volunteers to help with invasive species and trash removal. By the end of summer, 2011, these volunteers, local students and project staff are expected to clean and restore 7.5 acres of wetland.

**Breaking ground.** The first construction phase of the project is slated to begin in the spring of 2011, with plans to demolish existing channel infrastructure, re-grade land, and prune and remove trees. Once completed, a new phase of community visioning will take place to determine the best locations for viewing decks, walking trails, benches and other park features. In addition, the partnership will soon begin seeking out the involvement of local businesses to sponsor specific aspects of the implementation.



The Bayou Auguste restoration plan includes public amenities including a boardwalk, recreation trail, and viewing decks. *Image credit: GCCDS*

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## Lessons Learned

***Partner with well-established community institutions.*** By approaching BHA and the Biloxi Public Schools—two well-established and respected community institutions—early on, the GCCDS could count on the long-term partnerships required for restoration projects. In addition, these institutions offer key resources and community perspectives that tie the project to on-the-ground needs and community-level support.

***Play to each partner's strengths.*** The core mission of the GCCDS is to design and build sustainable, resilient housing for coastal communities—a mission that afforded technical expertise needed to design a large restoration project. Given the BHA's role in affordable property management, it was able to engage a majority of community members and adjacent property owners. The schools engaged local families by exposing students to real-world research in baseline and long-term monitoring, and these youth have, in turn, become the next generation of advocates for restoring the bayou and decreasing pollution. The City of Biloxi contributed time and resources from the city arborist, engineer and the Public Works department to carry out the demolition, removal and re-grading work. Further, by bringing in the LTMCP and their connections to AmeriCorps—a national network of civilian volunteers—the partnership drew volunteers for large, one-time restoration work parties, and is exploring longer-term solutions such as conservation easements.

***Engage with the public sector early.*** By engaging the city arborist and engineer from the beginning, the project was better able to achieve buy-in from the local government. Word spread quickly that the project was in line with the values city officials held: creating a natural, park-like amenity for this low-income neighborhood while increasing the city's resilience to storm surges. Viewed as a “win-win” solution for all, the government gained confidence early, and was a willing supporter.

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## For More Information

GCCS website:  
<http://www.gccds.org>

Contact:  
Britton Jones, (228) 436-4661 or [bjones@gccds.msstate.edu](mailto:bjones@gccds.msstate.edu).

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## Related Resources

***The Gulf Coast Community Design Studio***  
<http://www.gccds.org>



The Gulf Coast Community Design Studio (GCCDS) is a professional service and outreach program of Mississippi State University's College of Architecture, Art & Design. The GCCDS was established in Biloxi, Mississippi in response to Hurricane Katrina to provide architectural design services, landscape and planning assistance, educational opportunities and research to organizations and communities along the Mississippi Gulf Coast. The GCCDS works with non-profit organizations, local governments, universities, developers and other partners in all three of Mississippi's coastal counties, putting professional expertise to work in order to shape vibrant and resilient Gulf Coast communities.

***Five Star Restoration Program***

<http://www.nfwf.org/FiveStar>

The Five Star Restoration Program seeks to develop community capacity to sustain local natural resources for future generations by providing modest financial assistance to diverse local partnerships for wetland, riparian, and coastal habitat restoration. The grant is made available through a partnership between the National Association of Counties, the National Fish and Wildlife Foundation (NFWF), the Wildlife Habitat Council (WHC), in cooperation with the U.S. Environmental Protection Agency (EPA), Southern Company, and FedEx.





## CASE STUDY: COASTAL ALABAMA

# Smart Coast—Vibrant, Healthy and Walkable Communities

Building a healthy coastal region through sustainable business and smart growth

### Background Information

*Growing pains.* During her time as a Commissioner in Baldwin County, Alabama, Wendy Allen witnessed first-hand how rapid population growth was undermining the county's agricultural base and natural environment, and diminishing its residents' quality of life. Allen observed that these impacts were largely due to a lack of community planning, established development practices, and zoning regulations, coupled with increased migration to the coast.

In 2002, Allen teamed up with Charlene Lee, a community activist from Fairhope, AL, to explore principles of "smart growth," a development strategy that reduces urban sprawl by focusing on mixed use downtown development with vibrant, healthy and walkable environments. In 2004, after conducting several studies on coastal growth patterns and interviewing elected and appointed officials, Allen and Lee hosted a conference, in which over 200 decision-makers and community members engaged in a dialogue about smart growth principles. In early 2005, after the success of this and several other follow-up events, Allen and Lee founded Smart Coast, a nonprofit organization dedicated to promoting smart growth on Alabama's coast.

### AT A GLANCE

**Status:**

- In-progress

**Lead organization:**

- Smart Coast

**Participating organizations:**

- Green Coast Council
- Coastal Recovery Commission
- Envision Coastal Alabama
- Minority Business Enterprise Center
- Alabama Department of Transportation
- Downtown Mobile Alliance
- National Center for Bicycling & Walking

**Timeline:**

- 2002 – Present

**Funding:**

- Munson Foundation
- The Daniel Foundation
- Mobile Bay National Estuary Program
- Sybil Smith Charitable Trust

**Outcomes:**

- Complete Streets policies in five regional cities
- Key smart growth, green building and sustainability conferences
- Green Coast Council, a coalition of sustainable businesses
- Smart Walks to School

From the outset, Smart Coast’s strategy has been to lay the foundation for general education about smart growth in order to build new, cross-sector partnerships and actionable projects. The organization’s two main programs—Healthy Coastal Connections, a network dedicated to advancing smart growth, and the Green Coast Council, a forum for exchanging sustainable business management practices—are advancing this strategy.

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## Process

**Making the case.** Allen and Lee recognized early on that to advance the principles of smart growth, they would need to identify its value for key development stakeholders and decision-makers. They began by recruiting 30 volunteers from a cross-section of nonprofit and business organizations to interview key leaders’ perceptions of growth and development in the region. The results were published in a report, *“Growth and Development – A Balancing Act,”* which synthesized common themes and perceptions, and offered commentary “addressing the contradictions and the lack of cooperation in the region.” The report was shared widely and used to help foster further dialogue about smart growth in the region.

A second Smart Coast study compared development in coastal Alabama to other coastal regions that were implementing smart growth principles. The results were published in a second report, *“Growth and Development: Smart Growth Gap Analysis.”* This report featured case studies of coastal regions throughout the U.S., grouped into four categories: urban revitalization, resource conservation, community and stakeholder collaboration, and mixed use and walkable communities. The study revealed four key conclusions:

1. Successful smart growth communities had strong support from the state, enabling comprehensive planning on the municipal and regional level;
2. Involvement from local universities or colleges helped facilitate innovative projects, while saving on consulting fees and providing valuable experience for students;
3. Engaging citizens allowed for better planning and decision-making on behalf of communities; and
4. Compared to other smart growth coastal communities, Alabama lacked adequate communication and coordination between local jurisdictions. This observation was considered to be the key barrier to realizing effective smart growth in the region.

**Engaging the Community.** In 2004, Lee and Allen partnered with Envision Coastal Alabama to host a landmark conference, *“Smart Growth for Coastal Alabama: a Balancing Act.”* Designed to “inspire, educate, and enable participants to gain a balanced understanding of smart growth principles and potential impact(s),” the conference was the first significant convening of stakeholders in coastal Alabama for smart growth.

With an overwhelming response from the community, the partners hosted a follow-up workshop called *“Smart Growth Conference – Act II,”* attended by a diverse mix of business



Roundtable discussions at the “Smart Growth for Coastal Alabama – Act II” conference. Photo: Smart Coast

owners, developers, builders, realtors, elected officials, conservationists, and farmers. The result was the identification of common smart growth issues people felt should be addressed. A special emphasis emerged for mixed use development (i.e., development that includes mixed zoning for commercial and residential neighborhoods, and that encourages pedestrian-friendly streets).

In 2005, building on their successes to date, and with support from the Munson Foundation and several smaller foundations, Allen and Lee formed

*Smart Coast*, a nonprofit dedicated to bringing the region together to exchange ideas and influence policy, and ultimately to design healthier communities.

Advancing the mixed use theme from the Act II workshop, Smart Coast launched its next conference in 2006, titled “Imagine: A Region with Thriving Mixed Use Cities.” The conference had over 350 attendees, including three mayors and several smart growth experts from across the country. This set the stage for a series of working groups dedicated to implementing key conference recommendations.

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## Outcomes and Promising Practices

Smart Coast has acted on the information and experience gained from their conferences and networks to build a solid portfolio of projects. After sponsoring several additional workshops focused on topics ranging from green building, building codes and zoning, to farmland conservation, the organization is now focused on two main programs: *Healthy Coastal Connections* and the *Green Coast Council*.

***Healthy Coastal Connections.*** The Healthy Coastal Connections program engages Smart Coast’s network of policy makers, businesses, and concerned citizens to advance smart growth principles. Two of their main initiatives are “Walk to School” and “Complete Streets.”

The Walk to School project celebrates October’s International Walk to School Day by organizing “SmartWalks” at the five elementary schools in Fairhope, AL, and monthly walks at two other schools. Over 150 school children, parents, grandparents and siblings walk to school, to “revive the age old notion of school kids getting to school under their own power—their own two legs.” According to Lee, the intention of the Walk to School program is “to create healthier children, educate the public about the need for safe routes to school, and improve air quality by decreasing the number of cars idling in the carpool line.” The program is simple in design, yet profound in effect. It has raised awareness of the benefits on walkable streets, and resulted in a new network of parents and children who are advocating for safer walking routes.

The Complete Street project complements the Walk to School project by focusing on policy decisions with the potential to make streets “safer, more livable and welcoming to everyone.” The project recognizes that walkable streets increase community connectivity, encourage healthier lifestyles, and improve quality of life. To date, Smart Coast has successfully engaged the cities of Fairhope, Daphne, Orange Beach, Mount Vernon and Chickasaw, to adopt Complete Streets policies and practices, which have already shown results on the ground. For example, Whispering Pines road in Daphne has recently widened its sidewalks and added the first roundabout in the county (roundabouts decrease traffic congestion compared to traffic lights), and in Fairhope car lanes have been narrowed on Fels and Morphy Avenues to make room for cyclists.

According to Allen, coastal Alabama has “become so car dependent that our culture doesn’t even consider walking as a means of transportation and our children think it is for exercise only.” By creating more welcoming and accessible streets, the Healthy Coastal Connections program has begun to shift the mindset and need for car dependency and create a more active lifestyle in the region.



Children and parents participate in a monthly SmartWalk in Fairhope, AL. Photo: Smart Coast

**Green Coast Council.** In 2008, Smart Coast teamed up with the newly-forming Gulf Coast Branch of the Alabama Chapter of the United States Green Building Council (USGBC) to sponsor the first green building conference in Alabama, “*GreenCoast 2008*.” The conference brought together the design community in coastal Alabama to energize their emerging green building industry. Since the conference, three new, large buildings in the region have been certified under the USGBC’s Leadership in Energy and Environmental Design (LEED) program.

Smart Coast had a large presence at the conference, and began a dialogue with local businesses about the possibility of creating a new green business network. In 2009, after visiting a similar network in Grand Rapids, Michigan, Smart Coast convened a workshop focused on sustainable business called “*The Midas Touch – Turning Green into Gold*,” facilitated by Bill Stough from Sustainable Research Group. Through deep networking with partners such as the local Chamber of Commerce, they succeeded in bringing together over 70 local business representatives. Follow up meetings resulted in a new initiative called the *Green Coast Council*.

In 2011, the council initiated a charter membership—comprised of 12 founding members—with the purpose of exploring ways for businesses to share best practices in energy efficiency and conservation for resource savings, improved operations, and increased profits. Members convene once a month, alternating hosting responsibilities. The council is also involved in

external outreach and education, including hosting a speakers bureau for sustainable practices, and organizing a “Buy Local” campaign.

According to Gerri Kennedy-Holland, Green Coast Council’s President, and Executive Vice President of Office Equipment Company in Mobile, her first “a-ha moment” for sustainable business practices was when she implemented a no-junk mail policy, which she learned about



Chase Lamb, facility manager at Starr Textile Services, shows the Green Business Council money and energy saving actions the company has taken. Photo: Smart Coast

during one of the first council meetings. After implementing the policy, she discovered that her accounting staff had been spending two to three hours per week sorting through junk mail. Added up over time, these hours were causing significant productivity losses.

Kennedy-Holland realized that by implementing what she thought was a simple policy, she had in fact revealed a larger, hidden issue. Since then, she has implemented several other sustainable business practices, such as re-using shipping boxes (saving \$1.50 per box), and re-routing her trucks to a four-day delivery. The truck re-routing has decreased her monthly delivery mileage by 8,000 miles, saving roughly \$4,000 per month. Kennedy-Holland remarks, “Most of these practices are saving us money; it doesn’t always cost you money to be responsible.”

Through a combination of business networking, published print and online “green tips” and Green Council company profiles, a buy local campaign, and a planned sustainable business educational workshop, the Green Coast Council aims to replicate these successes, and create a critical mass of like-minded businesses.

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## Lessons Learned

***Build your case through evidence.*** Allen and Lee knew their region faced multiple development issues, but they needed real evidence to build the case for action. By engaging a wide range of community organizations, including a local university in researching the issue, they were able to significantly expand their own capacity while building the foundation for true regional collaboration. With two well researched reports, they elevated the starting point for dialogue around smart growth in coastal Alabama. From this vantage point, they were able to engage key decision-makers in pointed conversations and move a smart growth dialogue forward in a meaningful way. In the future they hope to engage local colleges and universities more actively in researching issues related to sustainability topics.

***Building new partnerships means finding common values.*** As Allen and Lee were organizing their first smart growth conference, they understood the need to garner support and participation from the realtors association, a group that did not embrace smart growth principles. The association felt the conference was one-sided, and wanted to include a speaker



who was “anti-smart growth” to balance out the agenda. Allen recalls preparing for hard negotiations when Lee advised her to “hold off, and see what they’re interested in.”

Lee then began the meeting by asking both sides to talk about their shared community values. What may have started as a confrontational meeting ended in positive dialogue focused on collaboration and partnership. All parties agreed to include the association’s speaker in the agenda, but decided that his message should be positive rather than negative. Allen remarked, “I learned a lot that day about being open to having all sides at the table, and determining up-front what everyone values. People want the same thing—it’s how they get there that’s the issue.”

***There are no shortcuts.*** Building a strong network requires hard work and patience. Allen and Lee spent countless hours on the phone, attending events, and making personal contacts. They agree, however, that the time they spent was worth it. The two have established deep roots in their community and have personal relationships with key stakeholders. Their network is now expanding faster and deeper than ever before, due in large part to their solid reputation and track record for getting things done.

***Inspire peers through success stories.*** When Kennedy-Holland discovered that sustainable business practices could save resources while also saving money, she suddenly shifted how she viewed her company. With a new vision, her inspiration has become infectious. “When business leaders hear that their peers are embracing and taking responsibility for the environment, and it won’t cost them lots of money, they are shocked,” she says. “When you can say, ‘I’m saving \$4,000 per month,’ their ears perk up.”

Everyone wants to “do the right thing,” but they also can’t compromise their bottom line. Stories of successful sustainable business practices help leaders bridge the gap between these seemingly opposing ideas. In addition, telling their stories helps establish their business in the community, and positions them to access new potential markets. The more companies embrace sustainable practices like energy efficiency and green building, for example, the more those markets will expand. Companies that are on the front end of those markets are the most likely to succeed.

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## For More Information

Contact:

Wendy Allen or Charlene Lee at Smart Coast, (251) 928-2309 or [info@smartcoast.org](mailto:info@smartcoast.org).

Smart Coast website:

<http://www.smartcoast.org>



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## Related Resources

*"Growth and Development: A Balancing Act."* Smart Coast.

<http://smartcoast.org/smartcoast/html/reports.html>

*"Growth and Development: Smart Growth Gap Analysis."* Smart Coast.

<http://smartcoast.org/smartcoast/html/reports.html>

*"Coastal Sprawl: The Effects of Urban Design on Aquatic Ecosystems in the United States."* 2002.

Prepared for the Pew Oceans Commission by Dana Beach, South Carolina Coastal Conservation League.

[http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting\\_ocean\\_life/env\\_pew\\_oceans\\_sprawl.pdf](http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting_ocean_life/env_pew_oceans_sprawl.pdf)





Photo: Alabama Coastal Foundation



## CASE STUDY: COASTAL ALABAMA

# 100-1000: A Partnership to Restore Coastal Alabama

A coalition to build 100 miles of oyster reefs and plant 1,000 acres of marsh

### Background Information

Oyster reefs are a vital resource for coastal ecosystems: oysters filter water, thereby reducing turbidity and improving water quality; they provide shelter and nursery habitat for Gulf of Mexico fish and shellfish; and the vertical walls formed naturally by the oysters protect the shoreline from wave action.

However, over the last several decades, Mobile Bay and coastal areas throughout the Gulf of Mexico have suffered severe coastal degradation, caused by extensive shoreline development, land loss and erosion, upstream pollution, and extreme storms. The result has been a significant loss in oyster reefs—and in their related sea grass and coastal marshland ecosystems—perpetuating a negative cycle of further degeneration to the natural coastal areas and oyster habitat.

This ecosystem loss has had a direct economic impact, as healthy oyster reefs supply the Gulf Coast's prosperous seafood industry; studies have shown Gulf of Mexico oyster reefs to be worth more than \$60 million per year, far surpassing the commercial value of the Gulf's annual seafood output.

When the Deepwater Horizon oil rig exploded in April of 2010, staff from the Alabama Coastal Foundation (ACF) and Mobile Baykeepers

### AT A GLANCE

**Status:**

- In-progress

**Participating organizations:**

- Alabama Coastal Foundation
- Mobile BayKeeper,
- The Nature Conservancy
- The Ocean Foundation

**Timeline:**

- 2010 - Present

**Funding:**

- Funded through existing resources

**Outcomes:**

- 20 jobs for fishermen
- New oyster reefs
- Hundreds of volunteers engaged

**Key themes:**

- Coastal restoration
- Cross-sector collaboration
- Disaster recovery
- Volunteerism
- Storm resistance
- Job creation

(MBk) responded immediately, collaborating to recruit, organize and mobilize volunteers for clean-up, recovery and advocacy work. Before long, these environmental organizations came together with The Nature Conservancy (TNC) to envision a better, cleaner long-term future for Mobile Bay and the Gulf.

They conceived of the idea to replenish 100 miles of oyster reef systems and replant 1000 acres of marshland, a program that TNC had implemented successfully in the Mississippi Sound. As Ms. Casi Callaway, Executive Director of MBk explains, “We needed to focus on something



Volunteers put down the base of a future oyster reef along the Alabama coast. Photo: Alabama Coastal Foundation

positive. That’s why working on this project means so much. It’s not just about the Bay or the watershed — this project means a lot to this community that has gotten whacked so badly and needs hope.”

By stepping back from the day-to-day coordination of emergency clean-up and developing a vision for restoring the Gulf Coast, MBk and ACF have been able to capitalize on their individual strengths and engage new partners and community members in reaching their goal of restoring coastal ecosystems, one mile at a time.

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## Process

***Coming together around a common challenge.*** Prior to the oil spill, environmental organizations in the Mobile area operated mostly in solitary silos, converging only periodically on shared projects. The threat posed by the oil spill brought the leadership of the ACF, MBk and The Nature Conservancy (TNC) together, as they recognized the need to speak with one voice in order to effectively and efficiently respond to the crisis and administer the resources flowing into the area. As soon as the disaster hit, local organizations were coordinating with federal agencies, volunteers — and each other.

Bethany Kraft, Executive Director of ACF describes the early stages of the collaboration, “We wanted to set up a volunteer program and then some intelligent person spoke out on behalf of clean habitat, and the idea was born to capitalize on the resources and attention being directed toward the Gulf by focusing our efforts. That’s how 100-1000 was born. I’d like to say it would’ve happened even if the disaster hadn’t brought us together, but I’m not sure that’s true.”

A mere two weeks after the spill, Kraft and Callaway found themselves on a four-hour drive to meet with the unified command team from the Environmental Protection Agency (EPA) which helped them strengthen their resolve to work together. As Callaway recollects, the bottom line

was clear: “This isn’t about you and it isn’t about me; it’s about being committed to the long-term health of the Bay and the Gulf.” Thankfully, others felt similarly, and regular early morning meetings began. Bill Finch, then a scientist with TNC and now Senior Fellow at the Ocean Foundation, was another pivotal partner in the project, providing a passionate vision of a healthy and vibrant Gulf.

**Funding sources.** Funding for the restoration projects has thus far come from existing budgets of participating organizations, including a grant to TNC from the U.S. Fish and Wildlife Service with supplemental funding from the National Oceanic and Atmospheric Administration (NOAA). An oyster reef restoration project had been in the works since before the oil spill, but the new situation and partnership goals greatly expanded the need, and MBk garnered matching support from the National Wildlife Federation to support the first quarter mile of restoration work. These funds have been supplemented with in-kind donations of materials and equipment from local businesses and contributions of staff time and other resources. Part of the \$120,000 budget came from the membership base of collaborators, who have stepped up to meet the new challenge.

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## Outcomes and Promising Practices

**Restoring the entire Alabama coast.** The partners have begun mobilizing volunteers and resources, and they plan volunteer days to deploy artificial oyster reef infrastructure—including thousands of bags of oyster shells—and to plant critical marsh grasses. Their goal is to restore ecosystems along Alabama’s entire coast over the next five years.

The first large day of volunteer action took place on January 22, 2011 in Helen Wood Park, where more than five hundred local residents and concerned visitors came together to lay down 16,000 bags of oyster shells along a quarter-mile of shoreline at the mouth of the Dog River.



Volunteers build an artificial oyster reef by laying down hundreds of bags of oyster shells. Photo: Alabama Coastal Foundation

The collaboration has continued to grow since it was launched in late 2010, boasting more than a dozen cross-sector partners from both the private and the public sectors. The project continues to recruit additional collaborators through educational campaigns targeting coastal property owners about the importance of maintaining natural landscapes.

The process has also helped give back to the community in the form of jobs for out-of-work fishermen. In particular, communities of Vietnamese and Cre-Asian fishermen represented by Boat People S.O.S.—a local non-profit organization based in Bayou La Batre—were beneficiaries

of the budding partnership, after being overlooked in BP's Vessels of Opportunity oil clean-up program. Working with TNC, approximately twenty fishermen have been trained in oyster restoration projects, helping increase local expertise for the upcoming work while also providing much-needed economic opportunity for the local community.<sup>1</sup>

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## Lessons Learned

**Partnerships are difficult, but worth it.** "What makes 100-1000 work, and what has allowed restoration work in Alabama to jump forward past the other Gulf Coast states, is that organizations are pulling together in the same direction. Alone we're all fabulous, but together we're a train you can't stop," says Kraft.

**It's important to build trust.** Trust has been an important element of the partnership, especially with organizations that at times compete for the same opportunities and audience. Callaway says, "It requires courage; when I step on Bethany's toes, she calls me out, in private, and we fix the problem. That's the way it's been with the vast majority of successful partnerships I've been in—you need to be able to face problems head-on."

**Be strategic with your vision.** By choosing to invest in oyster reef restoration, the 100-1000 partnership is addressing a slew of coastal issues, including land loss reduction, erosion control, beachfront property damage amelioration, water quality improvements, and sea grass habitat restoration. Scientific research supports the value of this work, and the partners are committed to seeing it through.

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## For More Information

100-1000 website:

<http://www.100-1000.org>

Contact:

Casi Callaway, Executive Director of Mobile Baykeepers  
(251) 433-4BAY or [ccallaway@mobilebaykeeper.org](mailto:ccallaway@mobilebaykeeper.org).

Contact:

Bethany Kraft, Executive Director of the Alabama Coastal Foundation  
(251) 990-6002 or [bkraft@joinacf.org](mailto:bkraft@joinacf.org)

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<sup>1</sup> Restoration work is beginning to emerge as a potential source of job creation in the Gulf Coast more generally; the Environmental Defense Fund has found that \$1 million of investment in wetlands restoration can create up to 29 new direct and indirect jobs.

<http://blogs.edf.org/restorationandresilience/category/profiles-in-restoration>, May 2010.

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## Related Resources

### ***Alabama Coastal Foundation***

[www.joinacf.org](http://www.joinacf.org)

Since 1993, the Alabama Coastal Foundation (ACF) has worked to create a healthy balance between the conservation needs of our priceless coastal resources and the inevitable pressures of economic growth. ACF provides information to encourage responsible citizen action, and offers opportunities for volunteers to help preserve the environment and our coastal way of life. ACF's mission is to improve and protect the quality of Alabama's coastal resources by identifying and solving problems through education, cooperation and participation.

### ***Mobile Baykeeper***

<http://mobilebaykeeper.org/>

Mobile Baykeeper (MBk) is an environmental group with over 4,000 members that share a common interest in preserving and protecting the beauty, health and heritage of the Mobile Bay watershed. The Mobile Bay watershed covers two thirds of the state of Alabama, including more than 200 rivers, bays, bayous, creeks, inlets and sloughs; as such, MBk's work is statewide. Their priorities are clean water, clean air and healthy people along with responsible government and a healthy economy. MBk focuses on finding a balance between a strong, growing economy and the protection of our environment, public health and quality of life.

### ***Alabama Nature Conservancy***

<http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/alabama/>

Together with members, donors and conservation partners, the Nature Conservancy in Alabama has protected more than 120,000 acres of critical natural lands, from longleaf pine forests in northern mountains to beaches along the Gulf Coast.

### ***The Ocean Foundation***

<http://www.oceanfdn.org>

The Ocean Foundation (TOF) is a community foundation with a mission to support, strengthen, and promote those organizations dedicated to reversing the destruction of ocean environments around the world. TOF specializes in philanthropy and marine conservation, with specific experience developing and managing organizations, programs, funds and foundations in the private and public sectors. They support both site-specific efforts and global work focused on strengthening coastal and ocean ecosystem resiliency.



## CASE STUDY: HOUMA, LA

# TRAC's Louisiana Lift House

## An Evolution in Sustainable Housing for Bayou Communities

### Background Information

For the staff of Terrebonne Parish's Terrebonne Readiness and Assistance Coalition (TRAC), the challenge of maintaining long-term, sustainable, and affordable housing is central to recovery efforts. Faced with over 13,000 homes severely damaged or destroyed from hurricanes Katrina, Rita, Gustav and Ike—coupled with a rapidly eroding coastline—TRAC's challenge is unprecedented. According to Peg Case, TRAC's executive director, "if housing doesn't get addressed, we're going to lose our culture; we're going to lose our communities."

Under these daunting circumstances, Case describes a palpable shift in the community's resolve, and a consensus to find a sustainable way of life on the coast.

In 2005, TRAC partnered with Oxfam America and the Special Interest Group in Urban Settlement (SIGUS) at MIT's School of Architecture and Planning to create the Louisiana Lift House Project. Their goal was to design sustainable and affordable housing, appropriate for bayous and able to withstand Category 5 hurricane force winds. Core principles for the project include:

1. Replacing destroyed homes for low-to-moderate income families who cannot afford to rebuild without financial assistance;

### AT A GLANCE

**Status:**

- In-progress

**Lead organization:**

- Terrebonne Readiness and Assistance Coalition (TRAC)

**Participating organizations:**

- Oxfam America
- SIGUS-MIT

**Timeline:**

- Fall 2005 – Present

**Funding:**

- 2 bedroom lift house costs \$140,000 (3 bedroom costs \$163,000)

**Outcomes:**

- As of April 2011, six elevated homes for low-income bayou residents have been built

**Key themes:**

- Coastal zone construction
- Sustainable & affordable housing design
- Energy efficiency
- Storm resistance
- Post-disaster rebuilding

2. Designing and building to comply with International Building Code requirements for coastal zone construction;
3. Incorporating energy efficiency features, such as radiant barriers, tankless hot water system, and well insulated, fiber cement siding;
4. Addressing mobility challenges for elevated homes; and
5. Serving as a model of affordable, sustainable construction throughout the Gulf Coast Region.

The LA Lift House project supplements TRAC's existing advocacy services for low- and moderate-income housing, and is a natural extension of the organization's mission to be forward-thinking in the face of disasters and assist individuals and families who do not have the ability to recover on their own.

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## Process

The idea for the LA Lift House was first conceived in November of 2005, when Oxfam America introduced TRAC to Dr. Reinhard Goethert, director of MIT-SIGUS. Through a series of meetings, the group envisioned a sustainable housing model with the goals outlined above.

In the spring of 2006, Goethert's architectural design students traveled to Terrebonne Parish to begin conceptual designs. One MIT student, Zachary Lamb, worked with TRAC during the summer to help move the project from concept designs to shovel-ready construction documents.

Lamb explains that many of the design features of the Lift House were common to the area. He recalls, "some basic architectural designs were added by the students, like the overhangs and storm shutters, but the idea to run pilings from the ground all the way up to the roof structure—providing much more advanced resistance to wind pressure—came from what I and other students saw on the ground." Case also remarks that this was a key engineering feature of camp structures on coastal islands built in the 1920's, which are still standing today.

“If housing doesn't get addressed, we're going to lose our culture; we're going to lose our communities.”

— Peg Case  
Executive Director,

Despite their vernacular design, the robust pilings make the LA Lift House stand apart from other homes in the region; a reflection of a lost practice. They stand at 10-14 feet above ground level, in accordance with building code requirements for coastal zone construction. Most other buildings are not elevated to that level, or are not elevated at all. Betty Jane Adams, the owner of the first LA Lift House, has great confidence in her home. "A lot of houses are elevated, but none like this one; they're up high, too, but it's just that mine is better elevated."

By assessing residents' through extensive community engagement and dialogue with future lift house owners, the team was also able to design a home that would fit within the local landscape and the traditional values of the local bayou culture. Decks are designed to celebrate the outdoor lifestyle of bayou residents, for example, while the modular units allow for easy expansion to meet the needs of growing families.

To maximize local economic benefits resulting from the LA Lift Houses, local contractors are hired, and materials are purchased from local lumber yards. The construction process itself—building the structures on ground level before elevating them onto pilings—maximizes community involvement by utilizing local volunteers.

The lift houses are also built to be extremely energy efficient. Several design elements, such as minimizing solar heat gain through proper building orientation, and using natural air flow to increase cooling capacity, are tailored to meet the intense heat and humidity of the region. Other energy efficiency measures—such as maximized insulation, programmable thermostats, and tankless hot water heaters—reduce resource consumption and lower utility bills.

During the design process, TRAC was awarded a \$120,000 grant from Katrina Square Dancers, an ad hoc group who generously supported rebuilding efforts outside of New Orleans. TRAC leveraged these funds to raise additional capital from other charities and to maximize disaster funds to provide a 50% match for their low-income clientele. This financial assistance—provided by the American Red Cross, Catholic Social Services, Church World Service, LA Disaster Recovery Foundation, the St. Vincent de Paul Society, and the United Way for South Louisiana—was crucial for homeowners who found it difficult to navigate the often disjointed influx of federal housing recovery assistance.

Since 2005, TRAC has worked with almost 3,000 clients in five bayou communities of southeastern Louisiana, all of whom are in need of sustainable, affordable housing in their communities. Of these, six families have already moved into LA Lift Houses, and TRAC is currently engaging partners on how to expand this model for use in communities across the Gulf Coast. A clustering of Lift Houses is also being explored as a way to develop new communities.

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## Outcomes and Promising Practices

***Weather tested.*** The first three LA Lift Houses, constructed in 2007, withstood Hurricanes Gustav and Ike virtually unharmed. The impacts of those hurricanes raised the awareness of good construction techniques in the region. Many families have since prioritized good construction practices, choosing to elevate rather than rebuild to the status-quo.

***A replicable housing solution for the Gulf Coast.*** Today, TRAC is exploring a partnership with Global Green, a national green building non-profit, to replicate the lift house model in other



Gulf Coast communities. Global Green has designed and built several energy efficiency homes in the Lower 9<sup>th</sup> Ward in New Orleans, LA (see case study on page 7), and is sharing green building expertise with TRAC. Through this partnership, TRAC and Global Green envision a significant expansion of affordable, weatherized homes throughout the Gulf Coast.

**Verifying efficient design.** TRAC is beginning to evaluate the efficiency of its LA Lift Houses using the Home Energy Rating System (HERS), which measures and rates the efficiency of residential homes on a 100-point scale. The results will be used to improve the design and construction techniques of the LA Lift Houses, and provide additional training for contractors.

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## Lessons Learned

**Listen, and learn from the project context.** By keeping the project “close to the vest,” and listening closely to the needs and traditions of the community, TRAC was able to develop a product that truly fit community needs, while opening doors for collaboration and funding opportunities.

**Innovation requires buy-in.** Implementing new construction concepts involves more than just new design, it requires buy-in from all involved—from construction contractors, to code inspectors, to clients. According to Lamb, involving key stakeholders early in the process was essential to earning respect and enthusiasm.

Breaking the status-quo is often seen as risky for any professional. But clearly communicating the value proposition of alternatives can inspire change, helping people realize new opportunities rather than simply reacting to perceived risks.

**Maintain institutional knowledge.** Many disaster-response organizations are formed during crises, and then disband after relief dollars are spent. This pattern leads to a loss of institutional knowledge, which can be especially damaging during times of need. According to Case, “Institutional intelligence is what we can’t lose; when you lose that you start all over, whereas if you keep these groups in operation—even minimally—when the next event happens it doesn’t take that much energy to start up again.”

The LA Lift House offers a unique solution to this dynamic. Focusing on resilience, TRAC is able to maintain a sustainable organizational structure, while advancing a culture of community preparedness that maximizes the benefits of affordable housing, energy efficiency, and cultural preservation.

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## For More Information

Website:



[http://www.trac4la.com/TRAC1.1/page\\_lifthouse.php](http://www.trac4la.com/TRAC1.1/page_lifthouse.php)

Contact:

Peg Case, TRAC Executive Director, (985) 851-2952 or [pegcase@trac4la.com](mailto:pegcase@trac4la.com).

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## Related Resources

### ***Terrebonne Readiness and Assistance Coalition***

<http://www.trac4la.com>

TRAC's Mission is to assist individuals, families and communities to rebuild following disasters; to help navigate recovery plans for those affected; to strengthen planning and preparation for future disasters; and to empower people organizing to dramatically improve life in local communities.

### ***MIT Special Interest Group in Urban Development***

<http://web.mit.edu/sigus/>

The Special Interest Group in Urban Settlement (SIGUS) links housing and community interests in the Department of Architecture and Department of Urban Studies, focusing on developing areas worldwide. SIGUS explores the new professionalism emerging for architects and planners, and concentrates on service, participation and non-traditional client groups. SIGUS offer workshops and short courses, and carries out research and outreach programs stressing participatory methods in promoting affordable and equitable housing.

### ***Home Builder's Guide to Coastal Construction***

<http://www.fema.gov/library/viewRecord.do?id=2138>

The Federal Emergency Management Agency (FEMA) produced this series of 37 fact sheets to provide technical guidance and recommendations concerning the construction of coastal residential buildings. The fact sheets present information aimed at improving the performance of buildings subject to flood and wind forces in coastal environments. Photographs and drawings illustrate National Flood Insurance Program (NFIP) regulatory requirements, how to properly site coastal buildings, and recommended design and construction practices for building components, including structural connections, the building envelope, and utilities.





Photo: South Bay Communities Alliance



## CASE STUDY: CODEN & SOUTH MOBILE COUNTY, ALABAMA

### Powering through Disasters with Renewable Energy

Solar power keeps community response center up and running even when the electricity goes out

#### Background Information

Hurricane Katrina ravaged rural Coden and other unincorporated coastal communities of South Mobile County, AL. Hundreds of families in these small, rural fishing villages were still suffering from damage to their homes and businesses when the BP disaster wreaked further havoc on the natural resources and livelihoods that sustain this isolated pocket of the Gulf Coast.

After the storm, residents pulled together to form the South Bay Communities Alliance (SBCA) in 2006. SBCA has been tirelessly advocating for the rebuilding of their community ever since. One concern was the need for a safe haven and temporary shelter for residents—many of whom were left without food, water, electricity, or refuge from the heat after Katrina—in the event of future disasters.

Through its efforts, SBCA was able to secure a 7,300 square foot building from the county to open a community resource and emergency response center that also serves as a frequent gathering spot and site for community events. The SBCA Coastal Response Center is

#### AT A GLANCE

**Status:**

- In-progress

**Lead organization:**

- South Bay Communities Alliance

**Participating organizations:**

- SolarCity
- Musk Foundation

**Timeline:**

- 2010

**Funding:**

- Approximately \$200,000 (donated) plus maintenance costs

**Outcomes:**

- Reduced energy costs
- Ability to generate own electricity and continue operations during power outage

**Key themes:**

- Renewable energy
- Effective advocacy
- Coastal resilience



SolarCity technician and the back-up battery system.  
Photo: Bridge the Gulf.org

staffed completely by volunteers, who also pay much of the center’s operating costs—including a \$500/month electric bill—from their own pockets.

When the Musk Foundation and California-based company SolarCity learned about the struggles of Coden, they decided that SBCA was an ideal candidate for solar power. They donated a \$200,000, 25-kilowatt solar system, with battery backup, which now sits atop the roof, powering the Coastal Response Center. The solar installation is one of the largest in Alabama.

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## Process

Paul Nelson, President of the SBCA Board of Directors, said the donation was the result of connections made during SBCA’s many trips to Washington, DC to make known the needs of the community. The Gulf Coast Fund for Community Renewal and Ecological Health, which has supported SBCA since 2006, attributed the donation to the community’s tenacity. The Gulf Coast Fund’s recommendation, coupled with Nelson’s effective advocacy before U.S. Congressional energy committees at the beginning of the BP disaster, encouraged a member of the Obama Administration to endorse South Bay for the donation.

In announcing the donation, SolarCity’s CEO said, “We reached out to the White House to see if there was a way to help area residents affected by the oil spill by donating a solar power system, and the White House suggested the SBCA and Coastal Response Center as a possible recipient. We hope that this project can serve as a small example of how renewable power can reduce our dependence on fossil fuels and lead us toward a cleaner, more sustainable future.”

The Musk Foundation—a project of the entrepreneurial creator of the Tesla electric car, Elon Musk—funded the donation of 108 solar panels, which were installed by a team of SolarCity workers with help from area residents in November and December, 2010. The solar power system will produce an estimated 33,500 kilowatt-hours of electricity annually, which should offset 90-100% of the Center’s electricity use. The solar system was dedicated at a community celebration on December 11, 2010 that featured a discussion on the advantages of solar power.

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## Outcomes and Promising Practices

The solar panel donation has had numerous benefits for Coden and its South Bay neighbors, demonstrating the value of renewable energy in locations where the power grid—and the community—is vulnerable to disaster. One of the most important benefits is that the Coastal

Response Center can keep operating when electricity goes out during a storm. Even with no sun, the battery back-up system can provide power for up to two days in an emergency.

Solar power also has the potential to save the Center thousands of dollars in operating costs each year. Since residents have been paying the costs of electricity and other operating expenses, and many have been out of work since the oil spill, the cost savings are even more welcome and important. When the system generates more energy than the building needs, the Center can sell the excess back to Alabama Power. Referencing the impact of the BP disaster on seafood prices and the community's long wait for federal rebuilding resources after Katrina, Zack Carter, an organizer with SBCA said, "Electricity bills are a big deal when you have to pay them out-of-pocket."<sup>1</sup>

The solar installation is increasing awareness of renewable sources of energy. More than 300 people turned out at the dedication ceremony in December, 2010 and local tradespeople were involved in the installation process. Residents are excited that one of the largest solar installations in Alabama has helped put Coden on the map. Says SBCA Secretary Stephanie Bosarge, "I'm so thankful... It's helping to pull our community together."

SBCA's leaders think the generosity of the Musk Foundation will have a lasting impact on the community. SBCA President Paul Nelson says of the donation, "Like my father and grandfathers before me, and thousands in Alabama's bayou communities, I have been a 'farmer of the sea' for most of my 60 years. My 300-year-old multicultural community is an integral part of the Gulf Coast's seafood and tourist industries. Because our living and culture depends on coastal waters and estuaries, we have been its natural stewards for generations. Our community's survival therefore is tied to both the economic and spiritual health of the entire Gulf Coast, indeed of the entire country."



Zack Carter, Stephanie Bosarge and Paul Nelson at the Coastal Response center.  
Photo: South Bay Communities Alliance

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## Lessons Learned

SBCA is still attempting to negotiate a favorable deal with its utility, Alabama Power. Zack Carter said that the power company is selling power to SBCA at a higher rate than what they pay for power generated by the Center's solar system. So SBCA has yet to fully realize the financial savings that are possible from the new system. Carter thinks this illustrates the challenges for small solar energy producers and urges other communities to work closely with

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<sup>1</sup> Bryan Walsh, [ecocentric.blogs.time.com](http://ecocentric.blogs.time.com), December 27, 2010.

solar engineers and, ideally, with their utility to make sure they realize the economic benefits of renewable energy.

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## For More Information

### Contact:

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(334) 450-1839, or [zcarter8@gmail.com](mailto:zcarter8@gmail.com).

Paul Nelson, SBCA President  
(251) 442-5213, or [paulnelson1957@gmail.com](mailto:paulnelson1957@gmail.com).

### SolarCity website:

<http://www.solarcity.com>

A national leader in solar power design, financing, installation, monitoring and energy efficiency services—SolarCity was founded with the mission to help millions of homeowners and businesses adopt clean power, protect themselves from rising gas and electricity costs and protect their environment from polluting power sources. The company’s SolarLease and Power Purchase Agreement options can make it possible for homeowners and businesses to switch to clean, solar power for less money than they currently pay for electricity. SolarCity’s 23 operations centers serve Arizona, California, Colorado, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Texas and Washington, D.C.

### Further reading:

<http://www.thedailygreen.com/living-green/blogs/cars-transportation/south-bay-community-alliance-solar#ixzz1Ka5VSXsd>





Greensburg, Kansas, immediately after tornado in 2007 (left) and now. Main St. photo: Joah Bussert, Greensburg GreenTown



## CASE STUDY: GREENSBURG, KANSAS

# Rebuilding Green in the Wake of Disaster

A small community reinvents itself as a model of sustainable economic recovery.

### Background Information

By the beginning of the new century, the small town of Greensburg, Kansas was—like many in the rural Midwest—on the decline. Greensburg’s outdated and inefficient post-war building stock meant high energy bills for residents and businesses alike. Jobs were disappearing rapidly as the area’s natural gas plants and big agricultural operations became more and more automated. The 2000 census count of 1,500 residents marked a 12% drop in just 10 years.

Then, on the night of May 4, 2007, an EF5-class tornado—wider than the town itself at nearly 2km—ripped through the heart of Greensburg. 95% of the building stock was completely demolished, the other 5% “severely damaged,” and the power infrastructure was decimated. Twelve people lost their lives.

A few days later, City Council President John Janssen—who would become Mayor within weeks—sat under an umbrella outside of the rubble that had been city hall, debating the town’s future with City Manager Steve Hewitt and then-Mayor Lonnie McCollum.

“We knew that there was no point in doing what we had been doing before; it hadn’t been working,” Janssen recalls. “We were rural and isolated, not a bedroom community that could rely on the resources of a bigger city. So we decided that if the town was going to survive, we

### AT A GLANCE

**Status:**

- In-progress

**Lead organizations:**

- Greensburg GreenTown
- City of Greensburg, KS
- John Deere/BTI-Greensburg

**Timeline:**

- May 2007 – Present

**Funding:**

- Federal Agencies
- Corporations
- Private donations

**Outcomes:**

- 26 certified green buildings
- 100% renewable energy
- Demonstration eco-homes

**Key themes:**

- Post-disaster recovery
- Green building
- Renewable energy
- Cross-sector collaboration
- Community outreach
- Eco-tourism

needed to rebuild green and make ourselves sustainable. Three days later the Mayor said as much on national TV, and we were committed.”

It was an audacious goal—and one that Janssen admits he didn’t really understand at the time—in a town without any previous experience in green building, renewable energy, or energy efficiency. But through the work of a few key visionaries in the local government, nonprofit and business communities, the support of private and federal funding, and a monumental effort from the town’s residents, the plan to rebuild sustainably has been realized, and the town is thriving. The aptly named Greensburg is now among the greenest communities in the country, and could make a strong claim to being one of the greenest in the world.

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## Process

**Community outreach.** As the Mayor began to talk about green rebuilding, the town needed a champion to really get the process going. “We had built a tower without building a ground floor,” says Janssen, referring to the town’s grand vision of green.

Daniel Wallach was starting to think about how it could be done. The tornado had spared Wallach’s house 35 miles away, so he didn’t face a personal rebuilding challenge, and he saw his extensive experience in nonprofit development and management as a chance to help Greensburg achieve its vision. He drafted a concept paper to present at the first post-tornado town meeting, held a week after the storm.

“The meeting was outside in a tent, and there was no electricity of course,” says Wallach, Executive Director of the nonprofit Greensburg GreenTown. “We weren’t sure if anyone would even be there. But sure enough, 500 people showed up.”

It was at this first meeting that Wallach began building that “ground floor.” With an extensive outreach process in the Greensburg community, he began to weave sustainability into every discussion and presented his vision for sustainability in dozens of workshops and community meetings. He met with local government and business leaders to learn about their challenges and limitations. And he interviewed residents—particularly those identified as local community leaders—to determine how people might connect with the concept of a green town.

“We found that terms like environmentalism and global warming really weren’t effective,” Wallach says. “But people here identified strongly with self-reliance, being thrifty and resourceful. These are descendents of the pioneers, people who gathered rain water and built using solar orientation, who even used wind turbines. That connection with the past, and wanting to pass it on to future generations, really resonated with folks.”

Wallach and his wife founded Greensburg GreenTown as an organization dedicated to helping individuals achieve this community vision of sustainability. The mission was to provide

residents the resources, information and support they would need to rebuild Greensburg as a model green community.

***City passes watershed building ordinance.*** In the recovery's initial clean-up phase—during which 40 tons of debris were removed—Wallach, Hewitt, and other sustainability advocates generated a groundswell of community support for sustainable rebuilding, which filtered up to the City Council. Janssen remembers being surprised by the degree to which the entire Council got on board with the idea. “The Council was very diverse, and I thought some of them would plant their feet and say ‘Hell, no!’” he says. “But they didn’t. Even the most reluctant members knew that the status quo wasn’t working, that we needed a new direction for the town. So we aimed high.”

In December of 2007, just seven months after the tornado, the city passed an ordinance mandating that every city building should be rebuilt to the highest standards—Platinum—of Leadership in Energy and Environmental Design (LEED). The LEED certification process uses a



Greensburg's Business Incubator—housed in one of the city's LEED Platinum municipal buildings—helps new businesses like the Green Bean Coffee Shop get off the ground. Photo: Joah Bussert, Greensburg GreenTown

point system to measure the environmental friendliness of a building, from its construction materials to how it uses energy. Different point systems exist for different kinds of buildings—with Platinum being the highest rating in each category. The regulation requiring Greensburg's municipal buildings to achieve LEED Platinum certification was the first of its kind in the country, and announced to the town and the outside world that Greensburg was serious about achieving a truly green community.

***The business community jumps on board.*** Days after the tornado, Mike Estes—the 4<sup>th</sup>-generation owner of Greensburg's John Deere dealership, which was wiped out in the storm—his brother Kelly, and fellow local businessman Scott Brown called a meeting of area business owners. “The three of us had been fortunate enough to not lose our homes, so we were a bit more free to organize,” says Estes. “All the businesses that people had been hearing about were going to leave and never come back, because there was no town, and we couldn’t just stand by and let that happen. So we called a meeting at one of the few standing buildings on the eastern edge of town.”

In attendance were 150 people, representing nearly 80 of the town's approximately 100 businesses. At the front of the room were three white boards labeled, “Stay,” “Go,” and “Don't Know.” After spending some time discussing what it would mean to rebuild, 66 of the

businesses wrote their names on the “Stay” board. They all committed to meet weekly for the following 18 months, bringing in different vendors, architects, discussing various construction topics in small groups, and generating ideas for how to bring their businesses back.

Daniel Wallach was a regular attendee, and his sustainable building ideas “caught on fairly quickly because they made good business sense,” according to Estes. But despite the business community’s general receptiveness to the *idea* of rebuilding green, a catalyst was needed to actually make it happen, which Wallach found in Estes.

Estes had decided to look into what achieving LEED certification for his dealership would take, and realized that with some support, LEED Platinum might be possible. He approached John Deere headquarters with the idea. After some discussion, it was decided that despite the additional up-front cost, “platinum certification represented the best, and everyone there believed John Deere should be the best,” remembers Estes. “So we shot for platinum.”

“When the John Deere dealer chose to build LEED Platinum, that was huge,” says Wallach. “They’re an icon in rural America, and their willingness to get on board really got people’s attention and gave the project credibility.” The local General Motors dealer and several banks quickly followed suit with highly-rated buildings of their own.



The new John Deere dealership in Greensburg, built to LEED Platinum certification. Photo: Emily Schlickman, Greensburg GreenTown

To Estes, building back green made sense from a business perspective. Most of the new dealership’s efficiency elements would be paid back within 7-10 years, while the building is expected to have at least a 50-year lifespan. Meanwhile, the building is saving thousands of dollars in utility bills, utilizing features like lighting that dims in the presence of natural light, heat generated from waste oil instead of natural gas, and reusing wastewater to maintain landscaping.

The dealership has come back more successful than ever, as other dealers from around the country visit the building for ideas. Estes’ company, BTI (which owns the John Deere franchise), has branched into manufacturing wind turbines—a venture co-housed in the new LEED Platinum building—and has clients all over the country and in Canada.

But the primary reason for his decision was the position his business and the John Deere brand held in the community. “We felt like it would behoove us as a prominent business and one of the larger employers to really show support for the local community, and for the effort they were putting in to get the town back on its feet,” says Estes, when asked why he was willing to

make the commitment. “We knew we were going to be watched, and that we could set an example.”

**Residential rebuilding.** The town’s LEED resolution applied only to city-owned and operated buildings. Private homes, like businesses, were under no obligation to build back green. But Wallach understood that residents would need to be the foundation of any sustainability effort, and focused much of Greensburg GreenTown’s work on helping homeowners realize the benefits of rebuilding a green community.

One step has been the design of a series of green building demonstration projects known as the Chain of Eco-Homes. The first Eco-Home was completed in 2009. It houses the Greensburg GreenTown office and green building center on the 2<sup>nd</sup> floor, while the first floor serves as a bed & breakfast where people can stay and experience green living first-hand.

The nonprofit also provides residents with a Sustainable Building Checklist, and has hosted dozens of workshops and demonstrations on different building techniques and efficiency features—inviting various experts, contractors, and designers to share the benefits of green building—to help residents understand their options.

“It doesn’t make sense to rebuild exactly what you had before, if what you had before was junk,” says Janssen, who has rebuilt his own home sustainably. “But it was important for people to know what they could do, and fortunately we had Daniel (Wallach) to hammer that information home.”

Most important, however, has been convincing residents that rebuilding a green home makes sense from a purely financial perspective. “It helped to present it as an economic issue, to show people simple options that would represent cost savings,” says Janssen. “Then people understood that they could get their money back on utility savings within five years, but they might live in their house for the next 40—and their kids would be there after that!” As interested as some residents were in joining the town new sustainability movement, the financial incentive of green building still generated the most interest.

**Funding.** In the wake of the tornado, Greensburg received a lot of initial government support, both financial and material. The tornado was the first major U.S. disaster since the 2005 Gulf Coast hurricanes, and FEMA and other federal agencies were eager to avoid making the same mistakes and redeem their public image. Support from federal agencies like the Department of Energy, Department of Agriculture, and the Environmental Protection Agency was supplemented by state government funding. Companies such as Frito-Lay and celebrities including Leonardo DiCaprio made major donations to the rebuilding effort, as well.

Yet, while an influx of outside money made it possible for Greensburg to make major strides in the first stages of a comprehensive recovery, the funding was only temporary. “You can’t play the tornado card very long,” says Janssen. “We were dying before the storm and needed to do

something unique, or no one would have come back afterward, and the money would be gone. But using that money to increase sustainability means that the initial funding can have a lasting effect.”

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## Outcomes and Promising Practices

By any measure, the Greensburg rebuilding story has been an incredible success. The town has reinvented itself as a living laboratory for green building, energy efficiency, and sustainability. Eco-tourism has become one of the town’s primary economic drivers, as individuals and groups from around the country visit Greensburg to witness the rebuilding first-hand, tour the different energy-certified buildings, and generate new ideas for their own communities. The town has won numerous awards for its rebuilding efforts; two of the latest are a Sustainable Community Award from Siemens, and a Global Green City award from the United Nations. Presidents Bush and Obama have both mentioned Greensburg in their State of the Union addresses.

The list of sustainably constructed buildings in town is remarkable, especially for a town of just 900 people. The Greensburg GreenTown website’s Sustainable Building Database lists 26 separate structures as of April 2011, including the local K-12 school, hospital, city hall, and courthouse; a “commons” building, which houses the library, museum, and an internet TV and radio station; two interpretive/arts centers; a number of businesses, including the John Deere/BTI building, multiple banks, the GM dealership, and a grocery store; a multi-unit residential townhouse; and at least seven single-family residences. Dozens of other buildings and homes have incorporated elements of sustainable design and building without earning an official rating.



The Green Visitor Center is housed in the flagship demonstration eco-home, the first of a planned dozen Chain of Eco-Homes.  
Photo: Stephanie Peterson, Greensburg GreenTown

The Chain of Eco-Homes, an initiative of Greensburg GreenTown, will be a series of demonstration sites that showcase state-of-the-art sustainable design, featuring different combinations of green building products and techniques, in different sizes and price ranges. The first (out of a planned dozen) has been built, and construction of a second—based on a sustainable design competition that received entries from 38 states and 13 countries—has begun across the street. The goal is to inspire residents—both within and outside of Greensburg—to recognize their myriad options when it comes to building a green home.

The entire town is powered by renewable energy, most of which is produced from a 12.5 megawatt wind farm built by John Deere Renewables. Greensburg is the first

municipality in the U.S to light its streets entirely with LEDs. Several of the buildings mentioned above also generate their own energy with small-scale wind turbines.

Two economic development initiatives—an up-and-running business incubator and an 80%-complete green collar industrial park—are creating new businesses and beginning to attract green jobs, an important goal for a town trying to stake a claim as the world’s greenest.

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## Lessons Learned

***Champions are needed across sectors.*** Greensburg’s story would not have been possible without exemplary leadership from Mike Estes in the business community, several local government officials—John Janssen and Steve Hewitt in particular—and the tireless efforts of Daniel Wallach and the staff of Greensburg GreenTown. Their ability to work together, reach out to the public, and achieve collaboration in every sector of the community made the entire project possible.

Yet ask any of these leaders about their respective roles in Greensburg’s rebuilding, and they are quick to point out that they were primarily facilitators, helping to pull together and coordinate the great work being done throughout the community. Wallach likens his role to the conductor of a symphony, as opposed to one of the lead instruments. Janssen claims he was most effective when he stayed out of the way of progress: “I was there to enable things,” he says. “Steve Hewitt was doing a great job. So were Daniel and the business community—I just wanted to keep it all rolling.”

***Find language that resonates.*** Achieving public and private support, especially for a far-reaching project such as Greensburg’s, depends on finding the right messages. Wallach’s initial outreach uncovered a strong sense of self-reliance and resourcefulness, and a concern for future generations, which guided subsequent public communications. On the business side, cost savings proved to be the key lever. “When businesses think about sustainability, the green that they’re really interested in is in their back pocket,” says Estes. “If they understand that building green will save them money, and allow them to reinvest in their businesses and hire more people, they will get interested in sustainability.” Taking the time to understand the real needs and wants of the community will make it possible to frame new projects in an understandable and relatable way.

***Get information to the public.*** Getting the public on board has been crucial to Greensburg’s success. While that process is easier in a very small town, public outreach should be a focus of any project. “Everything hinges on information—it’s as simple as that and yet it’s a complete paradigm shift,” says Wallach. “We’re so accustomed to thinking in seasons instead of decades, so getting people to think about longer-term return on investment is a real challenge. But once they do it, they realize that building sustainably is far more productive than any other financial investment.” Through a green building resource center, countless meetings and workshops, and



one-on-one assistance, aggressive public outreach has achieved that paradigm shift in Greensburg.

**Lead by example.** When Greensburg decided to require LEED-platinum municipal building stock, some in city government were tempted to put similar (though less restrictive) requirements on businesses and residents. But, anticipating a backlash from people being forced to make unwanted changes, the city instead adopted a strategy of leading by example, demonstrating the benefits, and encouraging others to follow suit. The result has been a positive reaction from the community, and a greater willingness to participate.

**Start rebuilding now, not after the next disaster.** Thankfully, most communities don't have to start rebuilding completely from scratch. But that doesn't mean they shouldn't start the sustainable rebuilding process anyway. As Mike Estes puts it, "A lot of rural communities have already had their tornadoes; they just haven't realized it yet. We woke up one day to ours, but a lot of it has been going on for a long time, economically people are going through a disaster. So we'd like to think maybe the Greensburg model could be used to help some of those communities do some new things and be raised up."

“Everything hinges on information—it’s as simple as that and yet it’s a complete paradigm shift. We’re so accustomed to thinking in seasons instead of decades, so getting people to think about longer-term return on investment is a real challenge.”

— Daniel Wallach, Greensburg  
GreenTown Executive Director

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## For More Information

Greensburg GreenTown website:  
<http://www.greensburggreentown.org>

Greensburg Sustainable Comprehensive Master Plan:  
<http://greensburgks.org/recovery-planning/Greensburg%20Comprehensive%20Master%20Plan%2001-16-08%20DRAFT.pdf>

Sustainable Building Database:  
<http://greensburg.buildinggreen.com/>

National Renewable Energy Lab Greensburg technical assistance overview:  
<http://www1.eere.energy.gov/buildings/greensburg/index.html>

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## Related Resources

### ***BTI-Greensburg John Deere Green Touch Screen***

<http://greensburg.johndeere.greentouchscreen.com/>

An interactive portal that allows web users to examine the new John Deere dealership's many green features. Explore the facility's wind turbines, LEED certification, and energy use data, among many others.

### ***Sustainable Home Checklist***

<http://www.greensburggreentown.org/sustainable-home-checklist>

Greensburg GreenTown's checklist of easy-to-answer questions relating to home energy use, water consumption, use of "green" products, etc. that can help residents gauge the sustainability of their homes. Designed specifically for a home in Kansas, but can be useful for homes anywhere.





# Resources and Opportunities





## Resources & Opportunities

The following lists select programs that can help with technical assistance, research, and funding for sustainable economic development in the Gulf Coast. While not a comprehensive list, it is intended to provide a quick reference for those interested in a targeted, short list of programs specific to the topics of Energy Efficiency and Renewable Energy, and Resilience and Restoration. *Note: descriptions are quoted directly from posted information on websites, and programs are listed in alphabetical order.*

### Energy Efficiency and Renewable Energy

#### 1. Abundant Power

Region: Nation-wide

Website: <http://www.abundantpower.com/About.aspx>

Topics: Energy efficiency financing

*Abundant Power Solutions focuses on the needs of energy efficiency financing programs nationwide. We partner with state and local governments and utilities to provide design, administration and scalable financial solutions. Abundant Power Solutions brings unique services to this emerging space:*

- Financial program management—design, administration and advisory expertise
- Energy loan underwriting
- Secondary market products and structure

#### 2. Alliance for Affordable Energy

Region: Louisiana

Website: <http://www.all4energy.org>

Topics: Legislative advocacy and monitoring  
Community outreach and organizing  
Sustainable building resources

*The Alliance is a nonprofit, public interest, membership organization that advocates for fair, affordable, environmentally responsible, community-based energy policies for Louisiana and the nation. Founded in 1985, today the Alliance serves Louisiana's 1.8 million electric and gas rate payers by promoting citizen participation in the decision-making process, conducting community education campaigns on energy issues, helping citizens and businesses become more energy efficient, and working together for lower energy bills.*



### 3. Global Green New Orleans

Region: New Orleans

Website: <http://globalgreen.org/neworleans>

Topics: Energy efficiency information and green building resource center  
Technical assistance  
Workforce development

*After the devastation of Hurricane Katrina and the inadequate response of the U.S. Government, Global Green made a commitment to sustainable building in New Orleans and the Gulf Coast.*

*Through our green affordable housing community the **Holy Cross Project**; our **Build It Back Green** initiative—educating residents on how to rebuild in a healthy green way; and our work on **greening schools** throughout the area, Global Green is committed to creating a green model for the development and rebuilding of New Orleans.*

### 4. Gulf Coast Energy Network

Region: Gulf Coast

Website: <http://www.gulfcoastenergynetwork.org>

Topics: Business networking (memberships)  
Energy efficiency and renewable energy research and policy development  
Educational outreach  
Conferences and workshops

*Gulf Coast Energy Network was established as a nonprofit coalition of prominent business, government, and environmental leaders who promote the efficient use of energy and water resources to benefit consumers, the environment, and economic growth. GCEN supports energy efficiency as a cost-effective energy resource under existing market conditions and promotes the use and expansion of alternative forms of energy. We advocate for energy efficiency policies that minimize costs to all sectors of the economy and that lessen greenhouse gas emissions and their impact on the global climate.*

### 5. Database of State Incentives for Renewables and Energy Efficiency

Region: Nation-wide

Website: <http://www.dsireusa.org>

Topics: Grant and financial incentive information

*DSIRE is a comprehensive source of information on state, local, utility, and federal incentives and policies that promote renewable energy and energy efficiency. Established in 1995 and funded by the*

U.S. Department of Energy, DSIRE is an ongoing project of the N.C. Solar Center and the Interstate Renewable Energy Council.

The DSIRE website is easily searchable, and provides up to date, comprehensive information on all state and federal incentives (not including grants) for energy efficiency and renewable energy.

## 6. Southeast Energy Efficiency Alliance (SEEA)

Region: Southeast United States

Website: <http://www.seealliance.org>

Topics: Best practice reports  
Energy efficiency research

SEEA promotes energy efficiency for a cleaner environment, a more prosperous economy, and a higher quality of life in the Southeastern region of the United States. SEEA's goals are to:

- Promote energy efficiency to increase electric reliability;
- Empower consumers at all income levels through education on the benefits of energy efficiency, including energy savings and quality of life; and
- Promote the development of a vibrant energy services industry throughout the Southeast, and growing markets for energy efficient products.

SEEA can be of assistance to the region by moderating some of the expected increases in energy consumption from the region's population growth. SEEA can also help gain greater acceptance of energy efficiency as a legitimate energy resource, alongside continued generation and transmission additions, in meeting energy demand. SEEA helps increase market penetration of ENERGY STAR® products and ensures that low-income residents are able to take part in energy efficiency initiatives.

## 7. U.S. Department of Energy, Energy Efficiency & Renewable Energy Disaster Recovery and Building Reconstruction

Region: Nation-wide

Website: [http://www1.eere.energy.gov/buildings/disaster\\_recovery](http://www1.eere.energy.gov/buildings/disaster_recovery)

Topic: Energy efficiency, rebuilding resources and training information

The U.S. Department of Energy (DOE) is working to encourage cost-effective, durable, and energy-efficient building reconstruction in areas struck by natural disasters. The Building Technologies Program offers resources for state and local officials, builders, and consumers, as well as training opportunities on building technologies and designs that can make a long-term difference in vulnerable areas. When applied, these technologies can result in safer, healthier, more economically viable communities that are less susceptible to disaster.

To address needs in the Gulf Coast region, DOE's Building Technologies Program is partnering with State Energy Offices (SEOs) to encourage regional exchange of information and best practices. DOE and the SEOs are also partnering with the National Association of State Universities and Land Grant Colleges, local universities, and local extension services to utilize their ready-made capacity for educational program delivery.

## Resilience and Restoration

### 1. Climate Community of Practice in the Gulf of Mexico

Region: Gulf of Mexico

Website: <http://www.masgc.org/climate/cop/index.html>

Topics: Network of resiliency practitioners

Workshops

Toolkit, including science resources, adaptation strategies, and communications

*The Climate Community of Practice brings together extension, outreach and education professionals, and community officials in the Gulf to learn how coastal communities can adapt to sea-level rise, precipitation changes and other climate-related issues. Extension, outreach and education professionals and local decision-makers work together so that they can be better equipped with reliable information and science-based guidance regarding the expected level of risk to their communities and strategies they can use to adapt to climate change.*

### 2. Coastal Vitality Project

Region: Greater New Orleans

Website: <http://www.coastalvitalityproject.org>

Topics: Online job bank (forthcoming)

Research on coastal vitality

Technical assistance

*Amid the continuing impact from the Deepwater Horizon Oil Spill, Greater New Orleans, Inc. (GNO, Inc.) and Chevron are providing critical support to southeast Louisiana's coastal communities by spearheading the GNO, Inc.-Chevron Coastal Vitality Project, a new initiative designed to identify long-term impacts and needs among businesses impacted by the oil spill, and then tailor solutions to accomplish the following goals:*

- *Market the sustainability and vitality of the southeast Louisiana coast brand;*
- *Support regional workforce development; and*
- *Catalyze small business capacity building and entrepreneurship.*

### 3. Community Restoration Network

Region: Global

Website: <http://www.globalrestorationnetwork.org/community-restoration-network>

Topics: Funding opportunities  
Restoration information  
Restoration Toolkit, including best practices, project factsheets, and list of experts

*The **Society for Ecological Restoration International** (SER) has designed the Community Restoration Network (CRN) to bridge the gap between the discipline of restoration ecology and communities around the world attempting to restore the ecological integrity of their surrounding landscapes. By providing practical knowledge, scientific understanding, and proven expertise, SER seeks to help meet the increasing needs of volunteer-driven, community-based ecological restoration projects around the world.*

*The mission of the CRN is to facilitate ecosystem and habitat restoration by helping local, grassroots and indigenous communities, volunteers, and non-professionals understand the basic tenets of ecological restoration and providing them with the tools needed to fund, plan, staff, implement, and monitor effective restoration projects.*

### 4. EPA Gulf of Mexico Program

Region: Gulf of Mexico

Website: <http://www.epa.gov/gmpo/index.html>

Topics: Restoration Information  
Project Funding

*The Gulf of Mexico Program was initiated in 1988 by the U.S. Environmental Protection Agency (EPA) as a non-regulatory program. Founded on the threefold principles of partnership, science-based information, and citizen involvement, the Gulf Program joined the Great Lakes and Chesapeake Bay Programs as flagships of the nation's efforts to apply an adaptive management approach to large coastal freshwater and marine ecosystems. The mission of the Program is to facilitate collaborative actions to protect, maintain, and restore the health and productivity of the Gulf of Mexico in ways consistent with the economic well-being of the Region.*

## 5. Gulf of Mexico Alliance

Region: Gulf of Mexico

Website: <http://gulfofmexicoalliance.org>

Topics: Resiliency Tools (see Highlighted Tools)  
Restoration Information  
Workshops and Meetings

*The Gulf of Mexico Alliance is a partnership of the states of Alabama, Florida, Louisiana, Mississippi, and Texas, with the goal of significantly increasing regional collaboration to enhance the ecological and economic health of the Gulf of Mexico. The five U.S. Gulf States have identified six priority issues that are regionally significant and can be effectively addressed through increased collaboration at local, state, and federal levels:*

- *Water Quality;*
- *Habitat Conservation and Restoration;*
- *Ecosystem Integration and Assessment;*
- *Nutrients & Nutrient Impacts;*
- *Coastal Community Resilience; and*
- *Environmental Education*

## 6. Gulf of Mexico Habitat Restoration Web Portal

Region: Gulf of Mexico

Website: <http://webportal.gulfmex.org/index.html>

Topics: Habitat restoration information

*The Gulf of Mexico Foundation has teamed with the National Oceanic and Atmospheric Administration (NOAA) and the Environmental Protection Agency's (EPA) Gulf of Mexico Program to provide information about Gulf of Mexico regional habitat restoration projects. The mission of the program is to:*

- *Educate the public about NOAA's National Estuary Restoration Inventory (NERI);*
- *Serve as a database for habitat restoration information activities in the Gulf of Mexico Region;*
- *Facilitate the listing of all qualifying habitat restoration projects in the Gulf of Mexico Region.*

## 7. National Oceanic and Atmospheric Administration (NOAA) Habitat Conservation & Restoration Center

Region: Southeast US

Website: <http://www.habitat.noaa.gov/restoration/regional/southeast.html>

Topics: Funding Opportunities  
Restoration Information

*The NOAA Fisheries Office of Habitat Conservation protects, restores, and promotes stewardship of coastal and marine habitat to support our nation's fisheries and preserve our coastal communities for future generations. Our efforts to protect and restore habitat help sustain and enhance ecosystem health and production. In 2010, we accomplished the following:*

- *Protected more than 14.7 million acres of coastal, marine, and Great Lakes habitat from harmful impacts and achieve a 90 percent success rate in getting proposed actions (from permit requests) modified to reduce adverse effects to habitat.*
- *Restored 6,925 acres of habitat for ocean, coastal, and Great Lakes fish and wildlife, and open 630 stream miles for migratory fish.*
- *Engaged the public with 100,000 volunteer hours in hands-on activities associated with habitat protection, restoration, education, and outreach.*

## **8. National Oceanic and Atmospheric Administration (NOAA) Restoration Atlas**

*Region:* Coastal United States

*Website:* [http://seahorse2.nmfs.noaa.gov/restoration\\_atlas/src/html/index.html](http://seahorse2.nmfs.noaa.gov/restoration_atlas/src/html/index.html)

*Topics:* Restoration Project Database

*The Restoration Atlas is an interactive map derived from the NOAA Restoration Center's project tracking database that provides snapshots of restoration projects throughout the country, including the Gulf Coast.*

## **9. Sea Grant Mississippi-Alabama, Louisiana, and Florida**

*Region:* Coastal Mississippi and Alabama

*Website:* [www.masgc.org](http://www.masgc.org); [www.laseagrant.org](http://www.laseagrant.org); [www.flseagrant.org](http://www.flseagrant.org)

*Topics:* Funding opportunities  
Restoration information and research  
Educational fellowships and resources  
Voluntary programs

***Participation requires university partner(s)***

*The National Sea Grant College Program works closely with the 32 state Sea Grant programs located in every coastal and Great Lakes state and Puerto Rico. These programs serve as the core of a dynamic, national university-based network of over 300 institutions involving more than 3,000 scientists, engineers, educators, students and outreach experts. This network works on a variety of topics vital to human and environmental health—topics such as water quality coastal hazards and biotechnology. Through their research, education and outreach activities, Sea Grant has helped position the United States as the world leader in marine research and the sustainable development of coastal resources. Sea Grant activities exist at the nexus of local, state, national and sometimes international interests. In this way, local needs receive national attention, and national commitments are fulfilled at the local level.*

# Select Federal Grant Opportunities

As of April 14, 2011 with application deadlines beyond June 2011

## 1. Department of Commerce: Economic Development Administration (EDA) Planning and Local Technical Assistance Programs

*Applications accepted on a continuing basis and processed as received*

### Support for Planning Organizations - CFDA 11.302

**Planning Program Total Funding – \$31 million**

- Partnership Planning – \$28,597,033 (*Median grant – \$61,000*)
- Short-Term Planning – \$2,402,967 (*Median grant – \$65,000*)
- Cost Share/Matching Requirement

*The Economic Development Administration's (EDA) Planning Program is one of six economic development assistance programs the agency operates under the Public Works and Economic Development Act of 1965. Under this program, EDA provides assistance to create regional economic development plans in order to stimulate and guide the economic development efforts of a community or region. As part of this program, EDA supports Partnership Planning investments to facilitate the development, implementation, revision, or replacement of comprehensive economic development strategies.*

*Information on the Economic Development Districts may be found on EDA's website at [http://www.eda.gov/PDF/EDD%20List\\_030410.pdf](http://www.eda.gov/PDF/EDD%20List_030410.pdf). Planning Partnership grants enable planning organizations to manage and coordinate the development and implementation of CEDS to address the unique needs of their respective regions. In addition, EDA provides Partnership Planning grants to Indian Tribes to help organize and assist with the implementation of economic development activities within their areas. The majority of funding under the Planning Program is for Partnership Planning grants for Indian Tribes and EDA-designated Economic Development Districts.*

### Technical Assistance - CFDA 11.202

**Total Program Funding – \$1,362,592**

- 6 regional offices all received \$227,099 (*Median grant – \$50,000*)
- Cost Share/Matching Requirement

*The Local Technical Assistance Program helps eligible recipients fill the knowledge and information gaps that may prevent leaders in the public and nonprofit sectors in economically distressed regions from making optimal decisions on local economic development issues. For example, EDA might provide funds to help a city prepare a feasibility study regarding the use of an abandoned manufacturing facility for an activity that advances local economic development.*

## 2. Public Works, Economic Adjustment Assistance & Global Climate Change Mitigation Incentive Fund

*Applications accepted for the following 2011 funding cycles:*

*Cycle 3: **June 10, 2011** (30% of overall funding)*

*Cycle 1 for FY 2012: **September 15, 2011** (10% of overall funding)*

### **Economic Adjustment Assistance - CFDA 11.307**

**Total Program Funding – \$38,620,000**

- Award Average – \$550,000
- Range of Awards – \$100,000 to \$1.25 million
- Cost Share/Matching Requirement

*Through the Economic Adjustment Assistance Program, EDA provides a wide range of construction and non-construction assistance, including public works, technical assistance, strategies, and revolving loan fund projects, in regions experiencing severe economic dislocations that may occur suddenly or over time. This program is designed to respond flexibly to pressing economic recovery issues and is well suited to help address challenges faced by U.S. communities and regions. For example, EDA might provide funding to a university or community college to launch a Regional Innovation Cluster strategy that supports the growth of varied industries, stem job losses in manufacturing businesses as a result of foreign competition, accelerate the commercialization of research, support high-growth business development, and promote diversification of the region's economy. As another example, EDA might provide funding to a city for the construction of a multi-tenant facility to house early-stage businesses that successfully graduate from a EDA-funded business incubator.*

### **Investments for Public Works and Economic Development Facilities - CFDA 11.300**

**Total Program Funding – \$133,280,000**

- Award Average – \$1.7 million
- Range of Grants – \$500,000 to \$2 million
- Cost Share/Matching Requirement

*EDA will provide strategic Public Works investments to support the construction or rehabilitation of essential public infrastructure and facilities to help communities and regions leverage their resources and strengths to create new and better jobs, drive innovation, become centers of competition in the global economy, and ensure resilient economies. For example, EDA may provide funding to a consortium of District Organizations to support the construction of a technology center that provides laboratory, office, and manufacturing space and leverages the resources of local universities, entrepreneurial networks, and the District Organizations themselves to provide comprehensive assistance to technology-oriented businesses with high growth potential. EDA may also provide funding to a State-established nonprofit to expand a rural economic development center, allowing the center to increase its capacity to provide services to underserved and vulnerable communities and small businesses.*

### 3. Corporation for National and Community Service

The Corporation for National and Community Service (CNCS) is a federal agency that engages more than five million Americans in service through Senior Corps, AmeriCorps, and Learn and Serve America, and leads President Obama's national call to service initiative, United We Serve. CNCS' AmeriCorps program provides resources, both human and financial, to organizations that engage Americans in intensive service to meet our country's critical needs. AmeriCorps provides grants only to organizations, not to individuals.

Grantees use the funding to support AmeriCorps members for intensive service in their community. AmeriCorps grants partially cover the expense of operating an AmeriCorps program and do not cover general organizational expenses. A cash and in-kind match is required.

There are a variety of ways to access AmeriCorps resources. Use the agency's fit finder, ([http://www.nationalservice.gov/for\\_organizations/programs/selector.asp](http://www.nationalservice.gov/for_organizations/programs/selector.asp)) or visit the How to Apply section of the site ([http://www.americorps.gov/for\\_organizations/apply/index.asp](http://www.americorps.gov/for_organizations/apply/index.asp)) to help determine which program best fit your organization's needs.

#### **AmeriCorps VISTA**

*AmeriCorps VISTA enables organizations to bring AmeriCorps VISTA members to their communities to help address critical anti-poverty needs. AmeriCorps VISTA members spend one year in full-time service to address the needs of low-income communities. All projects focus on building permanent organizational infrastructure to help them more effectively bring individuals and communities out of poverty.*

- [http://www.americorps.gov/for\\_organizations/apply/vista.asp](http://www.americorps.gov/for_organizations/apply/vista.asp)

#### **AmeriCorps NCCC**

*AmeriCorps NCCC provides a team of NCCC members to sponsoring organizations to engage in short-term service projects. Sponsoring organizations may submit a project application to the regional campus that represents the organization's state. The campuses provide assistance in completing the application, developing a work plan, and preparing the project sponsor for the arrival of the AmeriCorps NCCC team. AmeriCorps NCCC does not provide financial support.*

- How to become an NCCC Project Sponsor:  
[http://www.americorps.gov/for\\_organizations/apply/nccc.asp](http://www.americorps.gov/for_organizations/apply/nccc.asp)
- Contact Rich Smith, Director for Programming National Civilian Community Corps, Vicksburg Virginia: (601) 630-4043, or [Rsmith@cns.gov](mailto:Rsmith@cns.gov)

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### We welcome your feedback!

This Resource Guide will be converted into a web-based resource in order to provide valuable information to public, private and nonprofit sector leaders working to develop more sustainable economies and improve the resilience of their communities. If you have comments on the guide, or ideas for how to improve it, please send them to Mike Crowley, Senior Program Officer at the Institute for Sustainable Communities, at [mcrowley@iscvt.org](mailto:mcrowley@iscvt.org).

### About the Institute for Sustainable Communities

Since its founding in 1991 by former Vermont Governor Madeleine Kunin, ISC has led 77 transformative, community-driven projects in 22 countries. Our mission is to help communities around the world address environmental, economic, and social challenges to build a better future shaped and shared by all. We specialize in developing and delivering highly successful training and technical assistance programs that improve the effectiveness of communities—and the local leaders and institutions that support them—to take action on their most pressing challenges.

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