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The Southeast Energy Efficiency Alliance Green City Program

Assisting Cities and Municipalities to Engage Customers and Develop Effective Energy Efficiency Programs

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ABSTRACT

The Southeastern region of the United States is at a critical turning point in its development. With twice the population growth of the country overall, the demand for energy is projected to increase by 30% in the next 20 years, with much of the electricity load growth to be met by new baseload plants. Yet the region lags behind most of the rest of the country in its utility-sponsored energy efficiency program infrastructure. This presentation describes the work of a competitive City model for energy efficiency programs in the Southeast.

PHASE I established a more concrete, long term vision for energy programs by achieving the following: Recruiting program partners; Outlining funding opportunities; Creating a competitive request for proposal for cities marketing and outreach activities.

PHASE II works with existing capacity in a selected city and over a two year period to establish long-term, self sustaining mechanisms for reducing the energy use across all sectors while creating a new economy around efficiency. The City of Charlottesville, VA was selected in July 2009 for the project. During this phase, the following items occur: Organizing work; Concrete commitments; Implementation providers are identified; Financial commitments are identified; Programmatic goals and operating procedures are created.

Phase III is the full scale implementation of the city model for energy efficiency. The key to the success of this program is strong partnerships, communication and support from public and private sectors on best practice energy efficiency technology, programs, and financial solutions. This paper will present the process and implementation of the success of a Southern city to drive the deployment of energy efficiency.

For the first time in US history, cities have been granted federal funding to launch and maintain energy efficiency programs. Authorized by Congress in 2007 but without an appropriation, the Obama Administration provided \$3.2 Billion dollars as part of its overall stimulus package in February, 2009 legislation. In so doing, more than 2200 cities and counties received allocations by formula to provide energy efficiency in public buildings, residential and commercial sectors, and vehicle fleets. Part of the funding was set aside for competitive grants for particularly innovative local programming.

Also in February 2009, The Southeast Energy Efficiency Alliance (SEEA) released a Request for Proposals (RFP) from cities and counties within its region. Applicants were requested to create a community-wide energy efficiency alliance that would develop effective and engaging programs to improve and enhance energy efficiency within their jurisdiction by educating communities and implementing the necessary support infrastructure to facilitate building efficiency retrofits and upgrades.

The proposed program designs were to be largely based on efforts underway in Cambridge, Mass., Cincinnati, Ohio, New York, N.Y. and the U.S. Virgin Islands; the program goals of which are to create a five-to seven-year program that would achieve unprecedented gas, electricity, and water savings by retrofitting homes businesses, schools, and industrial buildings with efficient and renewable technologies. When implemented, the successful program will work toward the goal of saving participants in the winning city 20-40% on energy and water fees.

The competition was open to cities and counties in SEEA's 12-state region of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and the U.S. Virgin Islands. Proposals were due May 15, 2009, and were reviewed by an advisory panel of national experts in early June 2009. Criteria for selection included the depth of community involvement and support; comprehensiveness of the plan, to include program design, milestones, and demonstrated understanding of the community's market and energy characteristics; reasonableness of project objectives; and innovation in program design, marketing strategy, technology focus, and financing options. A final criterion was a plan to sustain the program after the grant funding period came to an end.

The City of Charlottesville, VA won the competition and was awarded \$500,000 (secured from regional and national foundations) for their proposed energy efficiency program. LEAP – Local Energy Alliance Program.

Additionally, both Charlottesville and Albemarle have dedicated funds from the Energy Efficiency and Conservation Block Grant (EECBG) funding through the American Recovery and Reinvestment Act of 2009, giving the new program an additional \$255,000 in startup funding, \$60,000 of which is from County allocations. LEAP programs began to be offered to customers earlier this year, and are focused primarily on single family residential homes.

Charlottesville's winning program was designed to be a local energy program that will achieve unprecedented energy and water savings by retrofitting buildings and installing renewable technologies in all end use sectors. The program is designed to achieve 30% - 50% market penetration with a 20% - 40% efficiency gain in 5-7 years.

The LEAP design includes a:

- Public-private partnership and a market-making approach
- Focus on building science, systems, and usage behavior
- Primary emphasis on energy efficiency
- Plan to deliberately phase in alternative and renewable generation
- Integration with available utility, state energy office incentives

LEAP's goal is to grow the energy efficiency market at such a scale that will develop new economic sectors, businesses, and infrastructure. LEAP will help put people to work and revitalize the local construction industry.

Additionally, an important underlying goal was to create a program model that is appropriate to the region, but also that will also be adaptable to and replicable in other communities.

Accomplishments to date for Charlottesville's LEAP include the following:

- Hiring of an Executive Director for the Local Energy Alliance Program (LEAP) in Charlottesville, VA on March 22, 2010 and four additional staff to manage an expanded program supplemented with \$800,000 in federal Energy Efficiency Block Grant funds (see GCP award in next section).
- Completion of a graphic logo design and website revision for the Charlottesville program. Website is located at www.va-leap.org
- Fully created a Governance Board for LEAP.
- Acquired office space and office equipment for LEAP
- Launched residential energy audits and subsidized retrofits in the Charlottesville area
- Launched a Home Energy Makeover Contest

SEEA's GREEN CITY PROGRAM (GCP)

In April 2009, SEEA was awarded \$20 million in funding pursuant to a competitive solicitation from the U.S. DOE to assist select cities in their region to develop comprehensive municipal energy efficiency programs. The DOE nationwide solicitation mirrored many of the same components and award criteria featured in SEEA's earlier competitive solicitation. DOE awarded \$390 M to a total of 25 grantees.

SEEA's award was based on expanding the Charlottesville model across the Southeast. The economies of scale and applied lessons learned, administered by a central nonprofit organization serving 11 southeastern states, promise quicker and more widespread adoption of quality energy efficiency programs than might otherwise occur. Through a RFP and formal review process, twelve Southeastern cities and the U.S. Virgin Islands were selected to participate in a regional effort led by SEEA to develop successful community-based energy efficiency programs that will create significant progress toward achieving financial, environmental, and community-specific goals. The cities selected for the GCP are noted on Table 1.

In order to best serve the selected cities in developing their energy efficiency programs, SEEA consults and assists each city as needed. Based upon our experience with the Charlottesville, VA project, SEEA developed several guidelines for creating, implementing, and sustaining successful Community-based Energy Efficiency programs.

Without adequate marketing, dedicated and ongoing education and outreach, contractor infrastructure, strong program design, an information technology platform for collecting and analyzing customer and energy data, and an effective coordinating agency, EE programs will not be effective or successful. Incorporating each of these components into program design affords the promise of dramatically increasing reach, cost-effectiveness, and sustainability. In addition, integrating principles of behavioral science, cities and municipalities can dramatically increase the effectiveness of their efficiency programs and affect long-term change in consumer energy utilization practices.

SEEA has identified several guidelines for assisting cities in designing and implementing energy efficiency programs to meet their objectives. Initially, it was determined whether an independent Energy Efficiency Alliance would be formed to assist with the administration of program objectives. Some cities already have resources and departments established to develop and govern efficiency programs. In others, the program objectives are best served by bringing together a coalition of stakeholders to design an effective program.

In making these determinations, SEEA asked these questions:

- What is the structure for the energy program delivery? Would it duplicate existing resources or services?
- What would it do?
- Will it gain political and community support?
- Will it have the intellectual and technical expertise to succeed?
- How can it generate the financial support necessary to succeed short and *long term*?

For the 3-4 cities where we concluded that a formal Energy Alliance makes best sense, SEEA acts to assist in bringing together an effective group of stakeholders. Members typically include: local elected officials, utility/power provider representatives, local nonprofits or foundations, neighborhood and community leaders, business leaders, and civic organizations.

SEEA is advising communities in tasks ranging from legal structure, human resources, and operational strategy, to mission/goal setting, and sustainable revenue plans.

Four elements are critical to a far-reaching and impactful community energy efficiency program: 1) Careful upfront organization of a coordinating body or Energy Efficiency Alliance, 2) Seamless program design, 3) Attractive financing options, and 4) Effective marketing and outreach. To achieve high participation rates, significant energy savings, and program persistence, SEEA is assisting cities in developing this most critical element: clear and effective communications, engagement, and education programs.

SEEA is consulting with GCP cities to determine their primary objectives for an efficiency program, and to identify for some the demographic composition of a valid sample group of customers from which to solicit input. Survey creation, administration, and data collection support are being provided by SEEA and its consultants so cities will have strong resources from which to create EE programs.

The SEEA Green City Program is also working with municipalities to coordinate efforts for administering, measuring, and validating program success. Marketing and outreach programs are designed to meet the Energy Efficiency objectives of each city, and will be designed to reach the varied and unique needs of their customer base. SEEA has developed several components to assist GCP cities in building robust and relevant engagement programs that have clear and unique messages and opportunities for participation by the different demographic groups of their customer base. To engage all sectors of the community, the Green City Program is designed to incorporate electric and gas utilities, local businesses, civic organizations, NGO's/agencies, not-for-profits, and community organizers. This holistic approach to developing an energy efficiency program provides much greater community buy-in and participation on many levels: there is "something for everyone" – it offers numerous opportunities for reaching customers and inciting participation.

SEEA GCP is also helping cities collect and build a database of qualified Performance Contractors and service providers to provide inspections and efficiency retrofits for homeowners. Information on available financing strategies and rebates/incentives is communicated to residential customers through the GCP to facilitate efficiency improvements.

COORDINATING AND CENTRAL SERVICES DELIVERY FUNCTIONS OF SEEA

To maximize the communications and adoption of lessons learned from one community to the next, SEEA has undertaken three key roles:

- Weekly teleconferences amongst all communities to discuss common issues;
- Regularly scheduled webinars to address key challenges, ranging from workforce development to local utility cooperation and marketing strategies; and
- Identification of technical assistance needs, and provision of that targeted assistance from SEEA staff and outside consultants.

All three roles have accelerated the learning of subgrantee communities, and assisted their program designs and early implementation experience. Based in large part on what emerged from these interactions, SEEA is directly contracting with vendors to provide three services accessible to all communities. In so doing, SEEA is simultaneously gaining economies of scale, assuring higher quality of services, and consistency in data gathering and reporting activities. The three central services are:

- Information technology services for data collection, customer tracking, contractor costing, and energy savings analysis;
- Branding and marketing materials;
- Residential financing

As we are still early in the provision of these services, it is too early to report results.

CONCLUSION

Keys to affecting real energy efficiency are to clearly identify program objectives, to create an effective coordinating body to administer EE programs, and to address customers on a community level. The SEEA Green City Program engages a dozen Southeastern cities, building a model for these community-based efficiency programs that can be used across the country. Building on the real-world experience and measured success from the first year of Green City Program, awards will be made by SEEA for the continuation of efficiency programs and performance for a subsequent period of two years; at which time it is anticipated several of these 12 Green City Programs will be self sustaining and continuing to evolve to meet the energy efficiency objectives of each community.

By June of 2011, our communities will have been implementing their programs for 3-6 months, and we will have customer participation and energy savings data to report. We will have a much clearer picture of how well disparate communities have applied the lessons and central administrative and consultative guidance to their customers. While we do not anticipate all succeeding, most will make significant strides to establishing a permanent energy efficiency program infrastructure. We also anticipate that our communities will stimulate greater commitments from state legislatures, public utility commissions, and utilities themselves to expand their energy efficiency resources and customer incentives. We also predict that many of our states and utilities will partner with our community programs to deliver their resources in the months and years ahead.

Table 1 – Map of SEEA Green City Program

