

## ENERGY STAR Appliance Program will launch next year

South Carolinians who want to replace old household appliances with new energy-efficient models would receive discounts of \$50 to \$500 this spring under the state's planned "Energy Efficient Appliance Rebate" program.

The rebates for new ENERGY STAR certified refrigerators, dishwashers, hot water heaters and other appliances are funded by South Carolina's share of the \$300 million in federal stimulus funds being distributed to each state for appliance rebates. A total of \$3.9 million will be available in South Carolina for rebates.

For appliances bought in a store, the rebate will be applied instantly when the customer goes to the register. Installers of whole-house equipment such as water heaters and HVAC systems will reserve rebates online and then provide customers with mail-in forms. An electronic system will track each rebate issued.

"This is a great opportunity for South Carolinians to save money at the store and every month when they open their utility bill," said John Clark, director of the SC Budget and Control Board's State Energy Office, which is managing South Carolina's rebate program. "We expect that interest will be high and that funds could be exhausted in a matter of weeks."

Rebate levels were determined based upon the cost difference between a standard and an ENERGY STAR appliance. ENERGY STAR qualified appliances incorporate advanced technologies that use 10–50 percent less energy and water than standard models.

The rebates will be available only to South Carolina residents making purchases in South Carolina stores and contractors. The program is expected to launch in March and will continue until all funds are exhausted.

Customers who purchase a new appliance must turn in the old item. Stores and contractors participating in the rebate program must agree to recycle all old appliances in accordance with standard industry practice. Recycling is required to



ensure that inefficient appliances are removed from the power grid.

Further information is provided on page four. Additional details, including the exact launch date for the program, will be announced in coming months. Frequently asked questions are addressed on page four of this newsletter. For regular updates, please visit [www.energy.sc.gov](http://www.energy.sc.gov).



# FROM THE DIRECTOR



**John F. Clark**  
Director  
South Carolina  
Energy Office

## Clean energy identified as key to success by ACEEE

A few months ago, I wrote that leadership in clean energy can be our state's economic salvation. A recent report by the American Council for an Energy Efficient Economy (ACEEE) confirms that thought, outlining a package of policies that could, in the next 15 years, cut electricity and water bills by \$5.1 billion and create almost 22,000 new, "green" jobs. The results of these policies would have an the economic equivalent of 175 new manufacturing facilities locating to the state.

This study reaffirms the fact that we, as a state, have plenty of room to improve. The ACEEE provides an annual energy efficiency scorecard for states, and South Carolina ranks 37th, being kept out of 45th place only by respectable building code requirements.

ACEEE developed 11 electric and five water efficiency policy suggestions that could be implemented in the state. The policy suggestions are based on successful models implemented in other states and in-depth consultation with stakeholders in South Carolina.

Of the 11 electricity policies

recommended, the report suggests that eight will be eligible to contribute towards a utility savings target that would be required by an energy efficiency resource standard (EERS). This target would be set at 18 percent of projected sales in 2025. The EERS represents the core of these policies, providing a foundation to which the other policies contribute to achieve the greatest savings.

The 11 specific electric efficiency recommendations include:

1. Continued improvement of building energy codes;
2. Advanced Building Initiative – incentives for energy efficient construction above and beyond code;
3. Behavioral Initiative – provide more and improved price and consumption information to consumers;
4. Combined Heat and Power – increase incentives for combining production of thermal energy (chilled water and steam) with electricity production;
5. Lead by Example – increase energy efficiency in public buildings;
6. Expand low-income weatherization programs;
7. Develop large-scale weatherization program for manufactured housing;
8. Manufacturer Initiative – expand technical assistance and efficiency incentives for manufacturers;
9. Develop and implement rural and agricultural efficiency programs;
10. Improve workforce training for "green collar jobs"; and
11. Expanded Demand Response Programs – deploy smart technologies and smart tariffs.

The ACEEE report (visit [www.aceee.org](http://www.aceee.org)) deals solely with economic opportunities resulting from energy efficiency. (*To read the full report, please visit [www.aceee.org](http://www.aceee.org).*) Thousands of more jobs can be derived from expanded development and use of renewable energy.

The point is this: the green revolution of energy efficiency and renewable energy is coming whether or not South Carolina decides to participate in a major way. But if we get on board at the head of the train, leadership in clean energy can be our economic salvation.

### BioEnergy summit draws large crowd, great interest

On October 15 the SCEO, the SC Biomass Council, and Clemson University joined forces to host a full-day summit in Florence at the Clemson Pee Dee Research and Education Center.

The meeting was attended by over 300 diverse stakeholders – the largest meeting ever organized by the SC Biomass Council. The central theme of the summit was to discuss federal climate and energy legislation and opportunities for switchgrass utilization in the bioenergy sector. The summit was followed by a Greening of Black America meeting hosted by the Corporation for Economic Opportunity to discuss opportunities for minority communities to integrate in the clean energy industry.



# Renewable energy efforts taking flight in SC

## *First state-led wind energy public hearing conducted in October*

The South Carolina General Assembly established the Wind Energy Production Farms Feasibility Study Committee in 2008 to review, study and make recommendations regarding the feasibility of windmill farms in the state.

A public hearing was held on October 12 at the Baruch Institute in Georgetown to give residents a forum to express opinions about the future of offshore wind development in South Carolina. The hearing was kicked off with a presentation by Santee Cooper about the utility's ongoing effort to research the opportunities for offshore wind development.

Senator Paul Campbell chaired the committee and said that the group was, "actively seeking public involvement at the hearing, wanting to hear about coastal residents' ideas, concerns, and support to help craft our recommendations to state leaders."

A total of nine official comments were provided to the committee and all were either in favor of offshore wind development, or were neutral. Despite bad weather, over 60 citizens were in attendance from a variety of locations along the coast. Citizens emphasized the need for new job growth in the area, green energy and a strategic approach that included job training for local citizens.

Among the questions and concerns voiced from the audience was the need to more fully examine the impact on coastal birds and consideration of the viewshed for coastal residents. These and other



public comments are being accepted by the committee through December 1, 2009 at [postmaster@energy.sc.gov](mailto:postmaster@energy.sc.gov) in order to be included in the final committee report which will be completed in January 2010.

The SCEO will be involved in future public forums as recipient of a U.S. Department of Energy Wind Powering America grant, which will kick off activities in December 2009 to generate market acceptance of offshore wind in the coastal regions of South Carolina and Georgia.

## **PSCFC secures \$4 million for clean vehicles, fuels, infrastructure**



The Palmetto State Clean Fuels Coalition was recently part of a successful bi-state effort to secure \$12.9 million dollars in federal stimulus funding to support clean vehicles, fuels and infrastructure across the Carolinas.

The Carolina Blue Skies and Green Jobs Initiative will provide support for alternative fuel vehicles and infrastructure projects, by collaborating with five alternative fuel partners across the Carolinas: Palmetto State Clean Fuels Coalition (PSCFC), Triangle Clean Cities Coalition, Centralina Clean Fuels Coalition, Land-Of-Sky Clean Vehicles Coalition and North Carolina Solar Center. The initiative is also supported by the North Carolina and South Carolina State Energy Offices, the North Carolina Biofuels Center, the North Carolina Department of Environment and Natural Resources and the South Carolina Department of Health and Environmental Control.

PSCFC estimates that South Carolina can expect to receive almost a third of the total grant amount—around \$4 million dollars. While this award contract and amount has not been finalized with the U.S. Department of Energy, PSCFC expects that the grant will provide for the following for South Carolina:

- 18 new publicly accessible E85 (ethanol) stations
- Nine new publicly accessible biodiesel (B20) stations
- Eight new publicly accessible propane (LPG) stations
- One new publicly accessible compressed natural gas (CNG) station
- 397 light and medium-duty vehicle conversions to propane (LPG)
- Five vehicle conversions to compressed natural gas (CNG)
- One heavy-duty hybrid truck

With the expanded availability of alternative fuel infrastructure, the Carolina Blue Skies and Green Jobs Initiative will be able to sustain itself far beyond the timeline set for this award. The start-up costs for vehicles and infrastructure installation is one of the primary barriers to alternative fuel use. These grant funds have been able to leverage over a 62 percent cost-share for vehicles and infrastructure, and will enable vendors to contract with retailers and fleet managers to install infrastructure to fuel a large number of existing alternative fuel vehicles while putting even more alternatively fueled vehicles on the road.

# Stimulus aid to public entities underway state-wide

The SCEO allocated \$40 million of the \$50.5 million received in federal stimulus funding towards energy efficiency improvements in public schools, public colleges and universities, and state agencies. Each award is being made as a 75 percent grant, 25 percent zero-interest loan. The loan repayments will be re-circulated into a low-interest revolving loan program dedicated to funding energy efficiency improvements in South Carolina long into the future.

Each of these entities was required to apply for its allocation and meet stringent requirements for the return on investment for its proposed energy efficiency measures. A goal of the program is to achieve a return of \$4 for every federal stimulus funding dollar invested.

As of press time, the SCEO had made awards for 85 applications, totaling \$25.5 million.

Units of local governments are also receiving funds through the SCEO's Energy Efficiency and Conservation Block Grant (EECBG) program, also funded by federal stimulus funds. More than \$5.75 million has been allocated across the state for energy efficiency measures for smaller towns, cities and counties that did not receive funding directly from the U.S. Department of Energy.

This funding was allocated geographically by Council of Governments (COG) region, and applications for funding are competitive within each COG. Applications are evaluated based on return on investment, job creation, leveraging of funds from other sources and environmental benefits.

As of press time, the SCEO had received 78 applications totalling \$6.4 million.

The evaluation and award process is expected to be completed by the end of January.

# SC Appliance Rebates

## Frequently Asked Questions

(continued from page 1)

### Q – What appliances are eligible?

**A** – ENERGY STAR qualified appliances from the list at the bottom of this page will be eligible for rebates for SC residents, when the appliances are purchased through retailers and contractors whose businesses are located in South Carolina.

### Q – When will the rebates become available?

**A** – The program is still in the design phase, but rebates should be available in early spring. Announcements will be made well in advance of the rebate period.

### Q – How much money will be available for the program?

**A** – The U.S. Department of Energy has given South Carolina approximately \$4 million for this program. Funds will be split into two pools – one for retail items such as refrigerators, dishwashers and clothes washers and the second pool of funds will be used for rebates on whole house items, such as HVAC equipment and hot water heaters.

### Q – How can I get a rebate?

**A** – A South Carolina resident can receive a rebate during the rebate period by contacting a qualified retailer or contractor. A list will be provided on our website. Retailers will be providing in-store instant rebates, while installers of whole-house items will be providing mail-in rebates.

### Q – Can I get a rebate on an appliance that I am purchasing now or have

### already purchased?

**A** – No. The program is not retroactive. To get a rebate, you must make your purchase during the program period, and you must secure a rebate at the time of purchase.

### Q – When will the program end? How long will the program last?

The program will end when funds have been fully expended. Our website will display a running balance so that consumers will know the availability of rebates.

### Q – Can I receive more than one appliance rebate?

**A** – You may receive multiple appliance rebates, but they must be for different products. For example, you can get a rebate for a dishwasher and a refrigerator, but not for two refrigerators.

### Q – Can I buy multiple appliances for rental or commercial property I own?

**A** – No. The program is designed for personal residential use only.

## Appliance Rebate Levels

Clothes washers	\$100
Dishwashers	\$50
Refrigerators	\$50
Room Air Conditioning Units	\$50
Central Air Conditioning Units	\$200
Heat Pump	\$500
Gas Furnace	\$500
Gas-Condensing Water Heater	\$400
Electric Heat Pump Water Heater	\$400
Hi-Efficiency Gas Storage Water Heater	\$100
Hi-Performance Gas Storage Water Heater	\$200
Gas Tankless Water Heater	\$400
Solar Electric Water Heater	\$400
Solar Gas Water Heater	\$400

# Annual ASCEM conference held in November

The Association of South Carolina Energy Managers (ASCEM) held its annual fall conference November 19 at Saluda Shoals Conference Center, with 176 people in attendance. ASCEM provides information to members to foster a common energy management program for South Carolina.

Several local energy managers presented to the group on the status of green initiatives in their field. John Malmarose, MUSC Chief Facilities Officer MUSC, presented a case study in performance contracting focusing on MUSC's efforts. Walter Hardin, Associate VP Facilities at Winthrop presented a case study to the group on his university's federal stimulus efforts. Dave Navey, a green truck specialist with Charlotte Truck Center, spoke about electric and hybrid work vehicles.

Exhibitors at this year's conference included Carrier Corporation, CMI Control Management, Inc., EcoWize, Efficient Energy Advisors, Energy Ace, Inc., England Enterprises, Inc. , GMK Associates, Harris Integrated Solutions, Inc., J.W. Vaughan Co., Inc., LPB Energy Management, Risk Tech, LLC, SchoolDude.Com, South Carolina Electric & Gas, Spirax Sarco, Inc. and Trane.

## The Mark A. Martin Association of South Carolina Energy Managers Scholarship

This scholarship is designed to assist ASCEM members with the higher education expenses of their family members. Students must be a graduating senior from a South Carolina school and plan to attend some form of education after graduation, including, but not limited to a college, university or technical college. Primary consideration is given to the student's academic effort, leadership ability and extracurricular activities, without considering financial need. This year, two scholarships were awarded.

**Amanda Jane Williams** is the daughter of Keith Williams, an ASCEM member and employee of Winthrop University. Amanda is attending Clemson University where she is studying communications. Amanda is a graduate of Westminster Catawba Christian School where she excelled in academics and athletics. Amanda was a member of the Beta Club, National Honor Society and the varsity cheerleading and tennis teams.



S.C. Energy Office Deputy Director Ashlie Lancaster gives an update to the ASCEM conference participants.

**Amy Elizabeth Simpkins** is the daughter of Floyd Clark Simpkins, an ASCEM member and employee of Spartanburg School District 4. Amy is studying biology at Wofford College. Amy was the valedictorian at Woodruff High School where she was also heavily involved in academics and athletics. Amy was a member of the tennis, basketball and track teams. She also served as senior class president and held several other leadership positions.

## Energy Manager of the Year Award

Kevin D. Ingalls, Director of Utilities and Energy Services at Bob Jones University, has been named the 2009 ASCEM Energy Manager of the year. This award recognizes the outstanding work of an individual energy professional in the field of energy management.



Ingalls was instrumental in initiating multiple energy projects for the University, as well as outlining steps to implement a campus-wide energy policy.

"He has been aggressive in metering and establishing a monthly reporting system detailing our energy and water consumption relative to past performance in our buildings," Mark Kopp, Chief of Facilities for Bob Jones University, said.

## Energy Project of the Year Award

The South Carolina School for the Deaf and the Blind was recognized for having the ASCEM Energy Project of the Year for its construction management project. This award recognizes the outstanding work of an organization to improve their energy management system by implementing measures to save energy.



The school added a 2000 KW electric resistance boiler to the central steam plant. The total calculated energy savings are projected to have a two-and-a-half-year payback, which is based on the total loan amount. The electric boiler is a flexible tool and helps manage steam generation cost. It allows the school to take advantage of low incremental off-peak rates. Having the electric boiler as an alternate source of heating energy has allowed the school to better negotiate natural gas purchasing and reduce the cost of natural gas use. The electric boiler is economic to maintain and somewhat simpler to manage than a natural gas boiler.

# Purchasing goes green

## SC Materials Management Office Announces Environmentally Preferred Purchasing Policy

Voight Shealy, Director of MMO, unveiled the state's new Environmentally Preferred Purchasing Policy at DHEC's Resource Conservation Challenge workshop October 28. The policy and accompanying standards are the result of months of work by a committee of agency representatives.

Catherine Vanden Houten, who represents the S.C. Energy Office on the committee, described the process as challenging and exciting.

"I was very impressed with the commitment of MMO and all the committee members to finding ways to reduce our impact on the environment," Vanden Houten said.

The policy acknowledges that South Carolina's government is "committed to environmentally preferred purchasing in recognition of the need to more efficiently use natural resources, reduce waste, save money, sustain markets for materials collected in recycling programs and protect South Carolina's environment, economy and the quality of life of all its citizens."

The full policy and accompanying standards can be found at:

<http://www.mmo.sc.gov/MMO/SignedGPIPolicyandStandards-Final.pdf>.



# ENERGY STAR manufactured home makes debut in Upstate

The South Carolina Energy Office recently received its first request for approval of documentation for the state's new \$750 income tax credit for an ENERGY STAR® manufactured home. Purchased at gallery of Homes of the Upstate, the home belongs to Phillip and Jessica Spradling of Easley.

An ENERGY STAR-qualified manufactured home is generally 30 percent more energy efficient in its heating, cooling, and water heating than a comparable standard code home. This increased level of energy efficiency can be met using standard technologies and manufacturing practices by successfully

integrating three key home components:

- An energy-efficient building envelope (e.g., effective insulation, tight construction, and high-performance windows).
- Energy-efficient air distribution (e.g., airtight, well-insulated ducts).
- Energy-efficient equipment (e.g., space heating, space cooling, and hot water heating).

And unlike a site-built home, an ENERGY STAR manufactured home enjoys the benefits of factory-controlled conditions and third-party verification. The ENERGY STAR program is a joint effort between the U.S. Department of Energy and the Environmental Protection Agency.



Mr. Spradling said the economic benefits played a large role in why he and his wife chose to purchase an ENERGY STAR home.

"We've always been focused on conservation, on saving energy and money, especially in a recession," he said.

Mark Dillard, Director of the Manufactured Housing Institute of South Carolina agrees.

"Homes remain in use longer than any other consumer product. It makes sense to focus energy efficiency incentives on housing because the payoff is year after year," Dillard said.

Utility companies state-wide are also encouraging this effort.

"Energy efficiency not only saves money for the homeowner, but saves money for the utility in the long run by delaying the need for new power supplies," Joel Ledbetter, General Manager of Easley Combined Utilities, said. "We think the tax credit is a great way to encourage people to invest in ENERGY STAR homes."

The tax incentives do not apply to modular homes. Manufactured homes are built to a national building code and modular homes are built to a state building code. The builder, developer or retailer selling the home can tell you whether the home you are interested in is a manufactured or modular home.

## Energy Technical Assistance Program will provide audits and assistance to public

The S.C. Energy Office is launching a new technical assistance program. The Energy Technical Assistance Program will provide energy assessments, energy audits and other technical assistance on energy-related matters to public, non-profit and private, for-profit organizations. These services will be provided by a team of energy consultants under contract with the South Carolina Energy Office. Preliminary applications are available on the SCEO

website.

If you think your organization would benefit from the technical assistance made available through this program, you can download a preliminary application from our website.

If you are an energy consultant that would like to be considered for participation in this program, please contact Catherine Vanden Houten at [cvandenhouten@energy.sc.gov](mailto:cvandenhouten@energy.sc.gov) or (803) 737-9852.

# SC home receives LEED Platinum designation

## *Central, S.C. house earns high rating for energy efficiency*

The SCEO played a small part in helping to reduce the carbon footprint of the extraordinary Frugoli-Kurtz home, recently completed in Central, S.C. The home is the first home in the state to be certified LEED Platinum by the U.S. Green Building Council.

The SCEO provided a \$1000 rebate to the builders for their solar water heater, the final rebate in our program to encourage builders to install such technology. The Frugoli-Kurtz solar hot water system collects heat using a glycol panel installed under the metal sheeting that covers the roof. Hot glycol is brought into the house via pipes and is run into the electric back-up water tank. The back-up water heater will only come on when the temperature of the water drops below a preset value, allowing the family to use electricity only when necessary. The home also gets 40 – 60 percent of its electricity from solar photovoltaic sheets



Photos courtesy of Bob Bourguignon, AIA, LEED AP, Sustainable Architecture

applied directly to the roof.

Other features that helped earn the Platinum designation include advanced framing techniques, dual flush toilets, rainwater collection for use in irrigation, low-flow plumbing fixtures, low or no-VOC paints and finishes and careful attention to waste generation and disposal.

Dr. Julia Frugoli and Dr. Harry D. Kurtz, scientists at Clemson University, began their project

in part to “stem the tide” of factors leading to global warming. They point out on their website chronicling the home’s construction that “while about 35 percent of greenhouse gas emissions in the US come from driving cars and trucks, almost 40 percent come from construction and maintenance of buildings. Thus, it’s as important to build green as to drive a hybrid car.”

The family also built the home as a memorial to their son Nathaniel, who was killed in a skiing accident at age 24. Nathaniel worked on a variety of engineering solutions to environmental problems, and the couple note that “this house is very much in the spirit of Nathaniel’s life, and we want it to be in part a memorial to him.”



## **Columbia Housing Authority is USGBC Outstanding Affordable Developer for 2009**

The U.S. Green Building Council’s Residential Market Development team selected the Columbia Housing Authority as the 2009 LEED for Homes Outstanding Affordable Developer. Tom Flanagan of USGBC noted that the Authority “has shown remarkable leadership in the sustainable housing

movement, and the fact that they operate in the HOPE IV affordable housing sector is just icing on the cake.”

The Columbia Housing Authority was honored at the USGBC Residential Summit, part of Greenbuild 2009, in November.

# SC receives nationally competitive stimulus

Much of the energy-related stimulus funding coming to South Carolina is "formula funding" based on state population and other factors. However, South Carolina businesses and organizations have also been very successful in competing with similar entities around the country for additional energy-related grant funding from the U.S. Department of Energy (US DOE) and the U.S. Environmental Protection Agency (EPA).

KEMET (Simpsonville), Celguard (Aiken and Charlotte) and Toda America (Goose Creek) all received substantial funding for the Electric Drive Vehicle Battery and Component Manufacturing Initiative. Celguard and Toda America both have operations in this state as well as other locations in the country. Celguard received \$49.2 million to work on production of polymer separator material. Toda America, which received \$35 million, will work on production of nickel-cobalt-metal cathode material. Both of these materials are used to make lithium-ion batteries. KEMET received \$15.1 million to produce both soft wound and stacked film capacitors necessary for electric drive system power electronics. The grant allows KEMET to reopen a plant in the upstate that had been closed due to the economic downturn.

The State Ports Authority received nearly \$2 million from the EPA's Diesel Emission Reduction Act (DERA) grants program. Funds are being used to repower 36 cargo handlers with cleaner engines. It will also allow the Ports Authority to partner with private companies to repower two tugboats and one dredge and install diesel multi-filters on 40 local drayage trucks.

The South Carolina Department of Education received \$553,917 from the DERA program for school bus driver anti-idling training, the installation of closed crankcase filtration ventilation (CCVF) systems on 200 1995 model school buses and the purchase of four diesel/electric hybrid school buses.

The South Carolina Technical College System will host several workshops to train faculty in solar installation technology, as a part of a multi-state grant organized by the North Carolina Solar Center in Raleigh and funded by the U.S. DOE.

The South Carolina Department of Commerce was the lead



applicant on a U.S. Department of Labor State Labor Market Information Improvement Grant, providing approximately \$760,000 to support the collection and dissemination of labor market information, and enhance the labor exchange infrastructure to provide career opportunities within clean energy industries.

Progress Energy received \$200 million from the U.S. DOE to build a green Smart Grid virtual power plant through conservation, efficiency and advance load shaping technologies.

Progress Energy will also use this award to install more than 160,000 meters across its North Carolina and South Carolina service area.

Duke Energy Carolinas received \$3.9 million from the U.S. DOE that it plans to use to install 45 phasor measurement units in substations across the Carolinas. The utility will also upgrade communications infrastructure and technology at the corporate control center.

Furman University received a \$2.5 million grant from the U.S. DOE that will allow the university to replace the aging HVAC heating and cooling system in the North Village student housing complex with an environmentally friendly and much more energy efficient geothermal heat pump system. The improvements will save the university more than \$2 million in energy costs over the next 20 years and substantially reduce its carbon footprint.

The South Carolina Department of Natural Resources received an initial grant of \$100,000 as part of a larger, effort nationally to study the development of geothermal energy.

Santee Cooper received a \$2,000,000 Certified Renewable Energy Bond (CREB) from the U.S. DOE for two 1.6MW additional engines to produce electricity from landfill gas at the Richland County Landfill in Elgin. This project will increase on-site generation from 4.8MW to 8MW.

Additionally, the South Carolina Energy Office has partnered to achieve almost \$5 million in competitive funds thus far in addition to formula funds.

Photo courtesy of the S.C. Technical College System.

## Clemson University Restoration Institute lands \$45 million funding to develop next-generation wind turbines

The next-generation wind turbines and drive trains will be tested by the Clemson University Restoration Institute in a move that is expected to create hundreds of jobs and place one of the most important sites for wind energy research and development in South Carolina.

The Clemson University Restoration Institute and its partners have just received a highly competitive \$45 million grant from the U.S. Department of Energy, to be

combined with \$53 million of matching funds to build and operate a large-scale wind turbine drive train testing facility at the institute's research campus on the former Navy base in North Charleston.

The U.S. Department of Energy estimates that South Carolina could gain 10,000 to 20,000 new jobs related to the wind power industry during the next 20 years.

# SCEO receives \$900,000 grant to improve industrial energy

## *Energy Office to help manufacturers improve their efficiency*

The South Carolina Energy Office (SCEO) will receive \$900,000 to help South Carolina manufacturers improve their energy efficiency. Over the next three years, the SCEO and the South Carolina Manufacturing Extension Partnership (SCMEP) will assist companies in lowering their energy usage through energy assessments and training workshops. The SCEO was awarded the funding through a U.S. Department of Energy (DOE) "Save Energy Now" competitive grant, a program aimed at helping American businesses and manufacturing facilities save energy and offset rising energy costs.

"This grant will enable us to help more of South Carolina's manufacturers become energy efficient and improve productivity," said John Irion, president of SCMEP.

Assessments help companies identify savings opportunities, focusing on things like process heating, steam, pumps, fans

and compressed air. The overall goal of each assessment will be to develop a plan that increases energy efficiency by at least 2.5 percent per year.

It's an amount, according to the SCEO's Tom Hudkins, that will add up quickly over time.

"Although 2.5 percent may initially sound like a small number, it's anything but," he said. "When you're talking about these facilities and the amount of power they use, 2.5 percent becomes an enormous figure over the course of several years."

A minimum of 24 assessments are planned over the next 36 months; they'll be aimed primarily at medium to mid-size manufacturers. Eligibility will be based on the highest savings potential as determined by DOE. Additionally, SCMEP will use its partner network to host training sessions throughout the state to further promote ways to increase energy efficiency.



## ConserFund loans awarded to four organizations

Erskine College, City of Clemson, Oconee Schools and Georgetown County are the most recent beneficiaries of the SC Energy Office's ConserFund loan program.

ConserFund is a low-interest revolving loan program for energy-efficiency improvements in state agencies, public colleges

or universities, school districts, local governments and private nonprofit organizations state-wide.

The City of Clemson received a loan of \$130,000 to install a Solar Pool Heating System for the Central-Clemson Recreation Center. This program will help the city save more than \$18,000 annually.

Erskine College received \$352,000 to conduct a campus-wide lighting retrofit, replacing lamps, ballasts and fixtures to reduce consumption, along with the addition of direct digital controls with energy management and building automation program control logic. These improvements will help the college save more than \$69,000 annually.

Georgetown County borrowed \$500,000 from the ConserFund program to perform building envelope improvements in seven buildings, including infiltration reduction, insulating thermal panels and attic and crawl space insulation. The county will also install energy control management systems in 10 buildings. These improvements and upgrades will help Georgetown County save more than \$57,000 annually due to greater energy efficiency.

The School District of Oconee County will install a high efficiency modular hydronic system and replace its pneumatic control system with a direct digital control building automation system with the \$500,000 loan the district received. By making these improvements, the district will save more than \$65,000 annually in energy costs.

### **Benefits of ConserFund**

- Annual interest rate is a fixed rate set below the Wall Street Journal prime rate (currently 3% through June 2010).
- Loans are for 100% of eligible project costs.
- Borrowers may finance projects from \$25,000 up to \$500,000 per fiscal year.
- Financing agreements have a maximum term of 10 years.
- No closing costs.
- Payments can be made monthly, quarterly, semi-annually or annually.
- Deferred initial payments are available for up to 18 months.
- ConserFund is focused on supporting the implementation of energy-efficient improvements that provide long-term cost reductions.



This holiday season, make sure your tree is energy efficient by purchasing LED lights to decorate.

New site:  
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New training collaborative website -  
<http://www.sctechsystem.com/green/index.htm>.

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