South Carolina Industrial Resource Fact Sheet

Energy Efficiency &

Renewable Energy

Introduction

U.S. DEPARTMENT OF

South Carolina's economy is ranked 28th in the nation in terms of 2008 GDP, generating \$156.4 billion annually. Industrial manufacturing is a vital sector of South Carolina's economy providing the state with 77,063 jobs and supplying 37,951.9 million worth of goods. Based on total value of shipments, the largest manufacturing sectors in the state are transportation equipment, chemical, plastic and rubber product, machinery, and paper manufacturing. In 2007, South Carolina's industrial sector ranked 15th in the nation in terms of energy expended accounting for 620.9 trillion Btu, or 36.7 percent of all energy consumed in the state. The state's industrial natural gas consumption totaled 78.1 trillion Btu which was the 26th in the nation for that year. Moreover, the industrial sector accounted for 11.4 million metric tons of carbon dioxide emissions according to 2005 data.

The South Carolina Energy Conservation and Efficiency Act of 1992 officially created the South Carolina Energy Office and tasked it with findings ways to save energy, improve energy efficiency and environmental quality, and help the area reduce its reliance on foreign oil. To achieve this objective, the energy office has embraced several goals including the 1.0 percent reduction of statewide energy intensity annually, reduction of greenhouse gas emissions, and to diversify the state's energy resources. In the state's energy plan, program administrators acknowledge that they will reach these goals if they administer grants to industry and other large consumers of energy to help them consume energy more effectively. In addition, there are numerous other resources available throughout the state that plant managers can consult for energy efficiency information or assistance in financing energy efficiency improvements at their facilities.



State Programs

State Government: The South Carolina Energy Office (SCEO) offers several programs to help industrial manufacturers in the state improve their energy efficiency. For example, industrial manufacturers are eligible for a state tax credit if they purchase and install energy-efficient equipment including lighting, HVAC systems, and water heaters. SCEO also provides on-site energy assessments and offers a grant of up to \$10,000 to help businesses in the state generate renewable energy. In addition, the South Carolina Department of Revenue offers three tax credits for industrial manufacturers for the purchase and installation of renewable energy equipment and the capture of methane gas.

Utility Resources

Public Power Utilities: Orangeburg Department of Public Utilities offers a rebate to nonresidential customers that switch their electric water heaters for gas-based water heaters. Santee Cooper also offers a rebate program. Customers must purchase a thermal energy heating system in order to qualify for a rebate and cost-share the development of a feasibility study to determine if this type of system will be compatible with a facility. In addition, Santee Cooper offers industrial energy assessments, design assistance, and a loan program for the purchase of energy-efficient equipment.

Electric Cooperatives: Several electric cooperatives throughout the state offer incentives to help industrial manufacturers improve their energy efficiency and lower their energy intensity. For example, Berkeley Electric Cooperative offers its members rebates for the purchase of a geothermal heat pump. Blue Ridge Electric Cooperative and Coastal Electric Cooperative also offer loans for energy-efficient heating equipment. In addition, Palmetto Electric Cooperative offers rebates for heat pump purchases while Pee Dee Electric Cooperative provides energy assessments that identify ways for cooperative members to consume energy more effectively.

Regional Resources

Non-profit: Southeast Energy Efficiency Alliance (SEEA) mission is to promote and achieve energy efficiency in the Southeast through networking, program activities, and education.

Clean Energy Application Center: Southeast CHP Application Center mission is to provide application assistance, technology information, and educational support necessary to promote Combined Heat and Power.

Local Resources

Non-profit Organizations: The Association of South Carolina Energy Managers partners with SCEO to provide training on energy management and direction for conducting industrial energy assessments.

Industrial Assessment Center: North Carolina State University and Georgia Tech University, with sponsorship from the Department of Energy, host Industrial Assessment Centers that offer small- to medium-sized manufacturers with energy assessments.

Manufacturing Extension Partnership (MEP): South Carolina Manufacturing Extension Partnership works directly with its local area manufacturers to provide expertise and services tailored to their most critical needs, ranging from process improvements and worker training to business practices and applications of information technology.

For More Information

DOE Industrial Technologies Program (http://www1.eere.energy.gov/industry/index.html) ITP Save Energy Now (http://www1.eere.energy.gov/industry/saveenergynow/) ITP State Activities Web site - South Carolina (http://www1.eere.energy.gov/industry/states/state_ activities/map_new.asp?stid=SC) ITP State Incentives and Resources Database (http://www1.eere.energy.gov/industry/about/state_ activities/incentive_search.asp) Tennessee Valley Authority (http://www.tva.gov/) Berkeley Electric Cooperative (http://www.becsc.com) Blue Ridge Electric Cooperative (http://blueridge.coop) Coastal Electric Cooperative (http://www.coastal.coop) Orangeburg Department of Public Utilities (http://www.orbdpu.com) Palmetto Electric Cooperative (http://www.peedeeelectric.com) Santee Cooper (http://www.santeecooper.com) South Carolina Department of Revenue (http://www.sctax.org/default.htm) South Carolina Energy Office (http://www.energy.sc.gov/)

Association of South Carolina Energy Managers (<u>http://www.energy.sc.gov/index.aspx?m=14</u>)

Contacts

Industrial Assessment Centers for Region Georgia Institute of Technology Director: Bill Meffert Phone: (404) 894-3844 Email: <u>bill.meffert@innovate.gatech.edu</u>

North Carolina State University Director: Dr. James W. Leach Phone: (919) 515-5228 Fax: (919) 515-7968 Email: <u>leach@eos.ncsu.edu</u>

Manufacturing Extension Partnership in

South Carolina South Carolina Manufacturing Extension Partnership Director: John Irion Phone: (803) 252-6976 Fax: (803) 254-8512 Email: jirion@scmep.org Web Site: http://www.scmep.org Source: http://blue.nist.gov/centers/SC

Clean Energy Application Center for Region

Southeast CHP Application Center Director: Louay Chamra Phone: (662) 325-0618 Email: <u>chamra@me.msstate.edu</u> Web Site: <u>http://www.chpcenterse.org/</u> Source: <u>http://www.cere.energy.gov/de/chp/chp_application_centers.html</u>

DOE Regional Contact

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State Energy Office Contact

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EERE Information Center 1-877-EERE-INF (1-877-337-3463) www.eere.energy.gov/informationcenter



