# Electronic Handbook of Industrial Resources NORTH CAROLINA



# Electronic Handbook of Industrial Resources

# **NORTH CAROLINA**

November 2010

# Introduction

This handbook provides a comprehensive listing of incentives, tools, and resources for industrial manufacturing energy efficiency in the state of North Carolina. The document is organized according to industrial system and features information on rebates, waived fees, tax credits, loans, and other resources, such as analysis tools, education and training programs, and energy assessments. The handbook is based on data available in the *States Incentives and Resources Database*, which is maintained by the U.S. Department of Energy (DOE) Industrial Technologies Program (ITP).

The States Incentives and Resources Database is a comprehensive searchable online database of approximately 3,100 energy efficiency incentives organized by state. The database is updated regularly and is accessible via the Save Energy Now State and Regional Partnerships' Web site:

http://www1.eere.energy.gov/industry/states/state\_activities/incentive\_search.aspx



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# State Industrial Overview

North Carolina has a total of 9.4 million residents and ranks 9th in the nation in terms of GDP, which is \$400.2 billion. The state is home to 14 Fortune 500 companies. In 2008, North Carolina ranked 14th in the nation's industrial energy consumption at 628.1 trillion Btu and 23rd in the nation's industrial natural gas consumption at 92.0 trillion Btu.<sup>1</sup>

North Carolina is one of the leading nuclear power producing states in the United States and ranks among the top 10 states in wind power capacity. North Carolina's electricity consumption is also among the highest in the nation.<sup>2</sup>

Exhibit 1 below compares the industrial energy consumption in North Carolina in relation to the national average. The chart in Exhibit 2 is a visual representation of the same data.

**Exhibit 1: Total Industrial Energy Consumption Statistics in North Carolina** 

Year	North Carolina Energy Consumption (Trillion Btu)	National Average (Trillion Btu)
2000	809.4	680.2
2001	758.4	642.8
2002	724.3	642.0
2003	712.5	639.6
2004	711.4	658.7
2005	695.3	696.7
2006	679.5	636.6
2007	643.3	637.0
2008	628.1	614.8

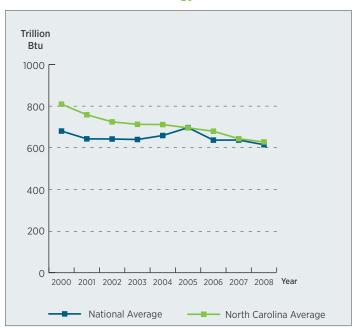
Source: http://www.eia.doe.gov/emeu/states/sep\_use/ind/use\_ind\_nc.html

# North Carolina at a Glance

State Information	
2009 Population (Million)	9.4
2008 GDP (Billion)	400.2
Rank by GDP	9
Energy Statistics	
Total Energy Consumption 2008 (Trillion Btu)	2,702.2
Total Industrial Energy Consumption 2008 (Trillion Btu)	628.1
Total Industrial Energy Consumption Rank	14
Total Industrial Electricity Use 2008 (Trillion Btu)	94.8
Total Industrial Electricity Use Rank	13
Total Industrial Natural Gas Use 2008 (Trillion Btu)	92.0
Total Industrial Natural Gas Use Rank	23

Source: <a href="http://tonto.eia.doe.gov/state/state\_energy\_profiles.cfm?sid=NC">http://tonto.eia.doe.gov/state/state\_energy\_profiles.cfm?sid=NC</a>

**Exhibit 2: Total Industrial Energy Use** 



# Federal and National Industrial Energy Efficiency Programs

In addition to the state level programs outlined in more detail in section III there are many government and non-government organizations that have resources to assist industry in the western region to utilize energy more effectively. Financial and technical resources are available from federal agencies, national laboratories, utilities, utility associations, industrial organizations, energy efficiency organizations, state energy offices, energy services companies, nonprofits or nongovernmental organizations, foundations, and private companies.

ITP is one such program that provides industrial manufacturers across the country with a variety of energy efficiency tools, resources, and incentives. ITP is a prime example of DOE's commitment to improving the energy efficiency of industrial operations in the United States. ITP is a multi-faceted outreach and deployment initiative designed specifically for industrial manufacturers. ITP supports research and development of energy efficient technologies, provides industry with energy management and assessment tools, resources, and information.

Several other federal agencies offer energy efficiency incentives in addition to the multitude of DOE resources. The Internal Revenue Service, for instance, provides tax incentives to industrial manufacturers that implement energy efficiency projects. In addition, the U.S. Environmental Protection Agency provides loans on new energy efficient construction and incentives on the implementation of combined heat and power systems. Finally, the U.S. Department of Agriculture is another federal agency that provides incentives to rural and small industrial operations seeking to become more energy efficient.

# State Incentives by Industrial System

# Industrial Systems General

### **Business Energy Analysis**

Business can complete a free online business energy analysis to save money.

### For More Information:

http://www.duke-energy.com/ south-carolina-business/energymanagement.asp

**Sponsor:** Duke Energy Carolinas, LLC **Sponsor Type:** Utility

### **Commercial Energy Tools**

These tools include a commercial energy adviser, a commercial calculator, and a commercial energy systems library.

### For More Information:

http://www.union-power.com/
comTools.aspx

**Sponsor:** Union Power Co. **Sponsor Type:** Utility

# Commercial or Industrial Site Assessment

The North Carolina Solar Center offers assessments of potential renewable energy applications for commercial and industrial sites. Often conducted in conjunction with surveys to identify savings in energy, productivity, and waste by the North Carolina State University (NCSU) Industrial Assessment Center (IAC) and the IES Energy Management Program, the Solar Center's assessments focus on practical ways companies can incorporate renewable energy.

### For More Information:

http://www.ncsc.ncsu.edu/ commercial\_industrial\_site\_ assessments.php

**Sponsor:** North Carolina Solar Center

**Sponsor Type:** Nonprofit

# Commercial/Industrial Request for Proposals (RFP) for Energy Efficiency Projects

This program solicits proposals for partial funding of energy efficiency projects by commercial and industrial customers and is available to customers with a peak demand of at least 250 kW. Proposals must be for a project completed after January 1, 2009, with a minimum life of three years. All types of energy efficiency projects are eligible, examples include HVAC, building envelope, energymanagement systems, lighting, motors, drives, and refrigeration applications.

### For More Information:

http://www.ncpublicpower.com/ RenewableEnergy/NCMPA1.aspx

**Sponsor:** City of Wilson **Sponsor Type:** Utility

# Commercial/Industrial RFP for Energy Efficiency Projects

This program solicits proposals for partial funding of energy efficiency projects by commercial and industrial customers and is available to customers with a peak demand of at least 250 kW. Proposals must be for a project completed after January 1, 2009, with a minimum life of three years. All types of energy efficiency projects are eligible; examples include HVAC, building envelope, energy management systems, lighting, motors, drives, and refrigeration applications.

### For More Information:

http://www.ncpublicpower.com/ RenewableEnergy/NCMPA1.aspx

**Sponsor:** North Carolina Municipal

Power Agency **Sponsor Type:** Other

### **Consulting Services**

PSNC Energy provides expert consulting services that can help industrial customers stretch energy dollars by providing businesses with a variety of services, including efficiency assessments and assistance with new construction projects.

### For More Information:

http://www.psncenergy.com/en/large-volume-business/services/consulting-services/default.htm

**Sponsor:** PSNC Energy **Sponsor Type:** Utility

### Design Assistance Commercial, Industrial, Residential Design Reviews

The North Carolina Solar Center provides residential and commercial design review services to builders, architects, designers, owners, and others involved in the design of a commercial or institutional building or of single-family or duplex homes located in North Carolina.

### For More Information:

http://www.ncsc.ncsu.edu/Design\_ Assistance CIRBDR.php

**Sponsor:** North Carolina Solar Center

Sponsor Type: Nonprofit

### **Electric Service Needs**

Lexington, along with ElectriCities, will assist a company or business by providing competitive rate options and programs that provide low and competitive costs for electric service. Services include energy efficiency studies, power audits, and peak load management recommendations.

### For More Information:

http://www.lexingtonnc.net/EconDev/
econdev1.asp?id=utilities

**Sponsor:** City of Lexington Electric

Utility

Sponsor Type: Utility

### **Energy Audit**

Albemarle Electric Membership Corporation (EMC) can help identify areas to save valuable heating and cooling dollars. This includes free energy audits along with an online energy evaluation.

### For More Information:

http://www.albemarle-emc.com/ Energy/EECampaigns.aspx

**Sponsor:** Albemarle Electric Membership Corporation **Sponsor Type:** Utility

### **Energy Efficiency**

EnergyUnited will help assess and audit energy usage by member businesses.

### For More Information:

http://www.energyunited.com/energy\_efficiency.asp

**Sponsor:** EnergyUnited **Sponsor Type:** Utility

# Energy Efficiency One Day Workshops

Energy efficiency one-day workshops enable our clients to maximize their competitiveness and sustainability through energy efficiency measures that lead to reduced operating costs. In doing so we will promote a more competitive position for North Carolina based industries and commercial institutions, and generate energy savings for state and local governments.

### For More Information:

http://www.ncsc.ncsu.edu/ energyefficiencyonedayworkshops.php

Sponsor: North Carolina Solar Center

Sponsor Type: Nonprofit

### **Energy Efficiency Program**

For members who have concerns about energy conservation, Surry-Yadkin Electric offers an energy audit to help members determine ways to improve energy consumption. Customers with questions should contact the Member Services Department at Surry-Yadkin EMC.

### For More Information:

http://www.syemc.com/index. php?option=com\_content&task=view&id=17&Itemid=37

**Sponsor:** Surry Yadkin Electric Membership Corporation **Sponsor Type:** Utility

# Energy Improvement Loan Program

The Energy Improvement Loan Program is available to North Carolina businesses, local governments, public schools, and nonprofit organizations for projects that include energy efficiency improvements and renewable energy systems. Loans with an interest rate of 1% are available for certain renewable-energy and energyrecycling projects, including solar, wind, small hydropower (less than 20 MW), and biomass. Loans with a rate of 3% are available for projects that demonstrate energy efficiency, energy cost savings, or reduced energy demand, including improvements to HVAC systems, energy management controls, high-efficiency lighting, and building envelope improvements.

### For More Information:

http://www.energync.net/funding/eilp. html

**Sponsor:** North Carolina State Energy

Office

Sponsor Type: State

### **Energy Management Program**

This program provides workshops and industrial energy surveys that identify opportunities and demonstrate techniques for optimizing energy use in various building systems, promoting energy conservation in industrial, institutional, commercial, and governmental buildings.

### For More Information:

http://www.energync.net/programs/industry.html

Sponsor: North Carolina State Energy

Office

Sponsor Type: State

### **Energy Survey Program**

Residential and commercial customers are eligible for a facility energy audit. An energy specialist will examine existing systems and identify ways to make them more energy efficient.

### For More Information:

http://www.guc.com/residential/energyservices.aspx#survey

**Sponsor:** Greenville Utilities **Sponsor Type:** Utility

### **Energy Surveys**

Waste Reduction Partners can help organizations identify energy efficiency opportunities and better understand and manage utility costs.

### For More Information:

http://wastereductionpartners. org/index.php?option=com\_con tent&view=article&id=58:energysurveys&catid=2:services

Sponsor: North Carolina Waste

Reduction Partners Sponsor Type: Other

### **Fact Sheets**

Various fact sheets are available on how to save energy with specific systems, such as lighting, temperature control, and ventilation.

### For More Information:

http://wastereductionpartners.org/index.php?option=com\_content&view=article&id=34:guides-and-fact-sheets&catid=7:resources&Itemid=26

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type**: Other

### Financial Incentives

North Carolina businesses and public organizations may take advantage of many financial incentives and low-interest loans for eligible renewable energy and efficiency projects.

### For More Information:

http://wastereductionpartners.org/index.php?option=com\_content&view=article&id=60%3Afinancial-incentives&catid=2%3Aservices&Itemid=6

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

# Industrial and Commercial Program

Central Electric will provide lighting analysis and design as well as motor efficiency testing and advice for its industrial customers.

### For More Information:

http://www.centralelectriconline.com/
page.php?p=7&s=14

Sponsor: Central Electric Membership

Corp.

**Sponsor Type:** Utility

### Industrial Revenue Bonds

Provides tax-exempt financing for eligible new or expanded manufacturing facilities, certain solid waste disposal facilities, and sewage disposal facilities.

### For More Information:

http://www.nccommerce. com/en/BusinessServices/ SupportYourBusiness/ FinancingBusinessGrowth/ IndustrialRevenueBondsProgram/

Sponsor: North Carolina Department

of Commerce

Sponsor Type: State

### Industries of the Future

The North Carolina Industries of the Future program focuses on research and deployment of new energy efficient technologies in energy intensive industries vital to North Carolina's economy, such as the mining, agriculture, glass, wood products, chemicals, and metals.

### For More Information:

http://www.energync.net/programs/industry.htmll

**Sponsor:** North Carolina State Energy

Office

Sponsor Type: State

### **Key Account Resources**

The Key Account Resources program is a no-cost technical assistance service that provides technical, business, research, and information assistance quickly and easily. The service includes an online library of information with a database of technical business and engineering documents and resources, and a free "Ask an Expert" hotline.

### For More Information:

http://www.wilsonnc.org/departments/wilsonenergy/industryandbusiness/keyaccountresources/

Sponsor: City of Wilson Sponsor Type: Utility

### Large Business Energy Analysis

The utility offers free energy assessments. Specialized programs cover process heating and food services.

### For More Information:

http://www.duke-energy.com/southcarolina-large-business/energyefficiency.asp

Sponsor: Duke Energy Carolinas, LLC

**Sponsor Type:** Utility

### Manufacturing Energy Assessments

The two main goals of the program are to provide energy conservation and cost reduction assessments to small to medium sized manufacturers and to educate the next generation of energy managers. Advanced undergraduate and graduate students from the Mechanical & Aerospace Engineering Department at NCSU with experienced faculty conduct a one-day assessment of the facility. Data on plant operations and energy costs are collected and analyzed to determine potential conservation measures.

### For More Information:

http://www.ncsc.ncsu.edu/NCSU\_IAC.php

**Sponsor:** North Carolina Solar Center **Sponsor Type:** Nonprofit

### N.C. Electric Membership Cooperative Loan Program

Interest-free loans of up to \$400,000 are available to commercial and industrial customers interested in making facilities more energy efficient. The loan term is seven years.

### For More Information:

http://www.roanokeelectric.com/comind.aspx

**Sponsor:** Roanoke Electric Cooperative **Sponsor Type:** Utility

### **PowerShare**

Duke Energy will work with customers to help them better understand their unique energy consumption profiles. Then the utility can assist customers in developing a customized plan that identifies potential curtailable loads.

### For More Information:

http://www.duke-energy.com/north-carolina-large-business/energy-efficiency/nclb-powershare.asp

**Sponsor:** Duke Energy Carolinas, LLC **Sponsor Type:** Utility

### Self Assessment Guide

The purpose of this guide is to encourage leaders to engage their organizations in striving for more efficient use of energy resources, thereby improving financial performance, pursuing cleaner air, and reducing dependency on foreign energy. Upgrading organizational performance increases productivity and improves safety.

### For More Information:

http://wastereductionpartners.org/ images/stories/guides\_and\_fact\_ sheets/self-assessment\_guide.pdf

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

### Services for Small to Medium Business

PSNC Energy provides programs and services to help companies understand and manage energy usage and become more energy efficient.

### For More Information:

http://www.psncenergy.com/en/small-to-medium-business/services/

**Sponsor:** PSNC Energy **Sponsor Type:** Utility

### **Smart Saver Incentives Program**

The rebates provided through this program are available to commercial and industrial customers that install energy efficient equipment.

### For More Information:

http://www.duke-energy.com/ north-carolina-business/energymanagement/energy-efficiencyincentives.asp

**Sponsor:** Duke Energy Carolinas, LLC

Sponsor Type: Utility

### **Specialized Energy Services**

Blue Ridge Electric provides specialized energy services, such as monitoring, power quality and harmonics monitoring, and energy auditing services.

### For More Information:

http://www.blueridgeemc.com/business-services/business\_services.

**Sponsor:** Blue Ridge Electric Membership Corporation **Sponsor Type:** Utility

### **Strategic Energy Planning**

Whether large or small, all organizations can benefit through some form of energy management planning. Waste Reductions Partners (WRP) professionals will share their expertise in helping clients craft an energy plan appropriate for their needs.

### For More Information:

http://wastereductionpartners.org/index.php?option=com\_content&view=article&id=59%3Astrategy-energy-planning&catid=2&Itemid=12

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

# Targeted Energy Management Assessments (TEMS)

As a result of Preliminary Energy
Diagnostic Surveys or by direct
request, customers may receive
more detailed technical services in a
specific energy topic relating to energy
efficiency, Combined Heat and Power
(CHP) or renewable energy. Focused
energy management surveys are
available in order to identify relevant
technology opportunities and energy
savings through best practices or
technology applications.

For More Information:

http://www.ncsc.ncsu.edu/TEMS\_ Energy\_Efficiency.php

**Sponsor:** North Carolina Solar Center

Sponsor Type: Nonprofit

# Constellation NewEnergy Online

This is an energy-management tool that is available to all electricity customers free of charge. The tool allows customers to find opportunities to improve their company's energy efficiencies, track changes in their company's usage, and compare usage across multiple facilities.

### For More Information:

http://www.newenergy.com/portal/site/menuitem.987b194dd5e782ce18a8 05e4da6176a0

Sponsor: Constellation NewEnergy

Sponsor Type: Utility

### **Energy Efficiency Projects**

Constellation Energy Projects Services provides solutions designed to achieve energy goals and promote a sustainable future by offering an extensive array of products and services.

### For More Information:

http://www.newenergy.com/portal/site/cne/menuitem.1b1af2559c566632782c7883da6176a0

Sponsor: Constellation NewEnergy

**Sponsor Type:** Utility

### **Energy Efficiency Projects**

The utility's sister company, Constellation Energy Projects & Services Group, helps commercial customers develop solutions to achieve energy goals.

### For More Information:

http://www.newenergy.com/portal/ site/menuitem.1b1af2559c566632782c 7883da6176a0

**Sponsor:** Constellation NewEnergy

**Sponsor Type:** Utility

# Lighting

### **Efficient Commercial Lighting**

Blue Ridge Electric Corporation and Lighting Solutions, Inc. will review a facility's lighting systems to determine if there are hidden opportunities to improve a company's bottom line.

### For More Information:

http://www.blueridgeemc.com/business-services/efficient\_lighting.asp

**Sponsor:** Blue Ridge Electric Membership Corporation **Sponsor Type:** Utility

# Energy Efficiency for Businesses

The Energy Efficiency for Business Program is available to all Progress Energy business customers, including commercial, industrial, and governmental customers. This program offers cash incentives (rebates) for prescriptive (predefined) energy efficiency measures, as well as custom measures.

### For More Information:

http://www.progress-energy.com/ custservice/carbusiness/efficiency/ programs/eebiz/index.asp

Sponsor: Progress Energy- Carolinas

**Sponsor Type:** Utility

# Energy Efficiency One Day Workshops

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### For More Information:

http://www.ncsc.ncsu.edu/ energyefficiencyonedayworkshops.php

Sponsor: North Carolina Solar Center

Sponsor Type: Nonprofit

### **Fact Sheets**

Various fact sheets are available on how to save energy with specific systems, such as lighting, temperature control, and ventilation.

### For More Information:

http://wastereductionpartners.org/index.php?option=com\_content&view=article&id=34:guides-and-fact-sheets&catid=7:resources&Itemid=26

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

### Financial Incentives

North Carolina businesses and public organizations may take advantage of many financial incentives and lowinterest loans for eligible renewable energy and efficiency projects.

### For More Information:

http://wastereductionpartners.org/ index.php?option=com\_content&view =article&id=60%3Afinancial-incentives &catid=2%3Aservices&Itemid=6

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

### Industrial and Commercial Program

Central Electric will provide lighting analysis and design as well as motor efficiency testing and advice for its industrial customers.

### For More Information:

http://www.centralelectriconline.com/page.php?p=7&s=14

**Sponsor:** Central Electric Membership

Corp.

**Sponsor Type:** Utility

# Manufacturing Energy Assessments

The two main goals of the program are to provide energy conservation and cost reduction assessments to small to medium sized manufacturers and to educate the next generation of energy managers. Advanced undergraduate and graduate students from the Mechanical & Aerospace Engineering Department at NCSU with experienced faculty conduct a one-day assessment of the facility. Data on plant operations and energy costs are collected and analyzed to determine potential conservation measures.

### For More Information:

http://www.ncsc.ncsu.edu/NCSU\_IAC.php

Sponsor: North Carolina Solar Center

Sponsor Type: Nonprofit

### Self Assessment Guide

The purpose of this guide is to encourage leaders to engage their organizations in striving for more efficient use of energy resources, thereby improving financial performance, pursuing cleaner air, and reducing dependency on foreign energy. Upgrading organizational performance increases productivity and improves safety.

#### For More Information:

http://wastereductionpartners.org/ images/stories/guides\_and\_fact\_ sheets/self-assessment\_guide.pdf

**Sponsor:** North Carolina Waste Reduction Partners **Sponsor Type:** Other

### **Strategic Energy Planning**

Whether large or small, all organizations can benefit through some form of energy management planning. WRP professionals will share their expertise in helping clients craft an energy plan appropriate for their needs.

### For More Information:

http://wastereductionpartners.org/ index.php?option=com\_content&vie w=article&id=59%3Astrategy-energyplanning&catid=2&Itemid=12

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

# **HVAC**

# Energy Efficiency for Businesses

The Energy Efficiency for Business Program is available to all Progress Energy business customers, including commercial, industrial, and governmental customers. This program offers cash incentives (rebates) for prescriptive (predefined) energy efficiency measures, as well as custom measures.

### For More Information:

http://www.progress-energy.com/ custservice/carbusiness/efficiency/ programs/eebiz/index.asp **Sponsor:** Progress Energy- Carolinas

Sponsor Type: Utility

# Energy Efficiency One Day Workshops

Energy efficiency one-day workshops enable our clients to maximize their competitiveness and sustainability through energy efficiency measures that lead to reduced operating costs. In doing so we will promote a more competitive position for North Carolina based industries and commercial institutions, and generate energy savings for state and local governments.

### For More Information:

http://www.ncsc.ncsu.edu/
energyefficiencyonedayworkshops.php

Sponsor: North Carolina Solar Center

Sponsor Type: Nonprofit

### **Equipment Rebate Program**

Residential and commercial customers in North Carolina that replace existing natural gas equipment with qualifying high-efficiency natural gas equipment are eligible for a \$250 rebate for a tankless water heater (EF = 0.82 or higher).

### For More Information:

http://www.piedmontng.com/ residential/aboutNaturalGasSection/ efficiencyPrograms1

**Sponsor:** Piedmont Natural Gas

Sponsor Type: Utility

### **Fact Sheets**

Various fact sheets are available on how to save energy with specific systems, such as lighting, temperature control, and ventilation.

### For More Information:

http://wastereductionpartners.org/index.php?option=com\_content&view=article&id=34:guides-and-fact-sheets&catid=7:resources&Itemid=26

Sponsor: North Carolina Waste

Reduction Partners

Sponsor Type: Other

### **Financial Incentives**

North Carolina businesses and public organizations may take advantage of many financial incentives and lowinterest loans for eligible renewable energy and efficiency projects.

### For More Information:

http://wastereductionpartners.org/ index.php?option=com\_content&view =article&id=60%3Afinancial-incentives &catid=2%3Aservices&Itemid=6

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

# Heat Pump and Water Heater Rebates

Heat pump rebates are \$100 per ton, while incentives of \$150 are available for the purchase of an electric water heater.

For More Information:

http://www.granitefallsnc.com/electric.

**Sponsor:** Town of Granite Falls

**Sponsor Type:** Utility

### **Heat Pump Financing**

Tennessee Valley Authority, in conjunction with local utilities, will offer a low-interest loan for the purchase and installation of a heat pump. The loan term is up to 10 years.

For More Information:

http://www.energyright.com/ heatpump/index.htm

**Sponsor:** Tennessee Valley Authority

Sponsor Type: Utility

### **Heat Pump Rebate**

Heat pump rebates are tiered as follows: \$150 for a minimum 13 SEER unit, \$250 for a 14 or 15 SEER unit and \$400 for a 16 SEER or ground/water source unit.

For More Information:

http://www.halifaxemc.com/ EnergyEfficiency/Rebates.aspx

Sponsor: Halifax Electric Membership

Corporation

**Sponsor Type:** Utility

### **Heat Pump Rebate**

Pee Dee Electric offers rebates of up to \$400 for the purchase and installation of an energy efficient heat pump in either a new construction or retrofit project.

#### For More Information:

http://www.pdemc.com/Services/ RebatesandServiceForms/ HeatPumpRebate.aspx

**Sponsor:** Pee Dee Electric **Sponsor Type**: Utility

### **Load Management**

Customers with energy efficient HVAC systems receive a monthly \$4 credit, while customers with electric water heaters receive a \$2 credit. In order to be eligible for these credits, a customer must participate in the utility's load reduction program, which temporarily shuts off these appliances during high-usage periods.

#### For More Information:

http://www.farmville-nc.com/departments\_utilities\_electric.htm

**Sponsor:** Town of Farmville **Sponsor Type:** Utility

### Load Management - Electric

If a customer installs a load management switch on a new electric water heater, the customer receives a \$150 rebate from the utility. The utility is then allowed to power down the high-energy appliance during peak use times.

### For More Information:

http://www.monroenc.org/services.php?cat=148

**Sponsor:** City of Monroe **Sponsor Type:** Utility

### **Load Management - Gas**

If a customer installs a load management switch on a new gas water heater, the customer receives a \$200 rebate from the utility. The utility is then allowed to power down the high-energy appliance during peak use times.

### For More Information:

http://www.monroenc.org/services.php?cat=181

**Sponsor:** City of Monroe **Sponsor Type:** Utility

### Manufacturing Energy Assessments

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### For More Information:

http://www.ncsc.ncsu.edu/NCSU\_IAC.php

**Sponsor:** North Carolina Solar Center **Sponsor Type:** Nonprofit

# Natural Gas Builders Incentive Program

The City of Rocky Mount Public Utilities (CRMPU) Department is offering an innovative program to encourage Rocky Mount and Nashville-area builders to install natural gas heating systems, water heaters, ranges, and clothes dryers in new construction for residential, commercial, and industrial buildings outside the existing City of Rocky Mount electric territory. The program is also available to customers converting or replacing an appliance from an energy source other than the city's electric system.

### For More Information:

http://www.rockymountnc.gov/utilities/gasincentives.html

Sponsor: City of Rocky Mount Utility

Sponsor Type: Utility

### Self Assessment Guide

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#### For More Information:

http://wastereductionpartners.org/ images/stories/guides\_and\_fact\_ sheets/self-assessment\_guide.pdf

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

### Strategic Energy Planning

Whether large or small, all organizations can benefit through some form of energy management planning. WRP professionals will share their expertise in helping clients craft an energy plan appropriate for their needs.

### For More Information:

http://wastereductionpartners.org/index.php?option=com\_content&view=article&id=59%3Astrategy-energy-planning&catid=2&Itemid=12

**Sponsor:** North Carolina Waste

Reduction Partners **Sponsor Type:** Other

### Water Heater Rebate

Pee Dee Electric offers rebates of \$50 for the purchase and installation of an energy efficient water heater.

### For More Information:

http://www.pdemc.com/Services/ RebatesandServiceForms/ WaterHeaterRebate.aspx

Sponsor: Pee Dee Electric Sponsor Type: Utility

### **Water Heater Rebate**

Tri-State Electric Membership offers \$50 incentives for the purchase of an energy efficient water heater.

### For More Information:

http://tsemc.net/tsemc\_rebates.html

**Sponsor:** Tri-State Electric Membership

**Sponsor Type:** Utility

# Other Building Systems

# **Commercial Energy Tools**

These tools include a commercial energy adviser, a commercial calculator, and a commercial energy systems library.

### For More Information:

http://www.union-power.com/
comTools.aspx

**Sponsor:** Union Power Co. **Sponsor Type:** Utility

### Commercial or Industrial Site Assessment

The North Carolina Solar Center offers assessments of potential renewable energy applications for commercial and industrial sites.

Often conducted in conjunction with surveys to identify savings in energy, productivity, and waste by the NCSU Industrial Assessment Center and the IES Energy Management Program, the Solar Center's assessments focus on practical ways companies can incorporate renewable energy.

### For More Information:

http://www.ncsc.ncsu.edu/ commercial industrial site assessments.php

Sponsor: North Carolina Solar Center

Sponsor Type: Nonprofit

### Design Assistance Commercial, Industrial, Residential Design Reviews

The NC Solar Center provides residential and commercial design review services to builders, architects, designers, owners and others involved in the design of a commercial or institutional building or of single-family or duplex homes located in North Carolina.

### For More Information:

http://www.ncsc.ncsu.edu/Design\_ Assistance\_CIRBDR.php

Sponsor: North Carolina Solar Center

Sponsor Type: Nonprofit

### E-300 Program

Prior to construction of a building, residential and commercial customers have the option of submitting plans to the utility. An energy specialist at the utility will identify ways to make the structure energy efficient.

### For More Information:

http://www.guc.com/residential/energyservices.aspx#E300

**Sponsor:** Greenville Utilities **Sponsor Type:** Utility

# Energy Efficiency for Businesses

The Energy Efficiency for Business Program is available to all Progress Energy business customers, including commercial, industrial, and governmental customers. This program offers cash incentives (rebates) for prescriptive (predefined) energy efficiency measures, as well as custom measures.

### For More Information:

http://www.progress-energy.com/ custservice/carbusiness/efficiency/ programs/eebiz/index.asp

**Sponsor:** Progress Energy- Carolinas

**Sponsor Type:** Utility

# Energy Efficiency One Day Workshops

Energy efficiency one-day workshops enable our clients to maximize their competitiveness and sustainability through energy efficiency measures that lead to reduced operating costs. In doing so we will promote a more competitive position for North Carolina based industries and commercial institutions, and generate energy savings for state and local governments.

### For More Information:

http://www.ncsc.ncsu.edu/ energyefficiencyonedayworkshops.php

Sponsor: North Carolina Solar Center

Sponsor Type: Nonprofit

### **Energy Management**

EnergyUnited's Energy Management program includes services such as facility monitoring, which provides immediate notification of system failures or other critical conditions that could cause costly repairs or loss if not attended to promptly.

### For More Information:

http://www.energyunited.com/energy management.asp

Sponsor: EnergyUnited Sponsor Type: Utility

### **Fact Sheets**

Various fact sheets are available on how to save energy with specific systems, such as lighting, temperature control, and ventilation.

### For More Information:

http://wastereductionpartners.org/index.php?option=com\_content&view=article&id=34:guides-and-fact-sheets&catid=7:resources&Itemid=26

Sponsor: North Carolina Waste

Reduction Partners

Sponsor Type: Other

### **Financial Incentives**

North Carolina businesses and public organizations may take advantage of many financial incentives and lowinterest loans for eligible renewable energy and efficiency projects.

### For More Information:

http://wastereductionpartners.org/index.php?option=com\_content&view=article&id=60%3Afinancial-incentives&catid=2%3Aservices&Itemid=6

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

### Manufacturing Energy Assessments

The two main goals of the program are to provide energy conservation and cost reduction assessments to small to medium sized manufacturers and to educate the next generation of energy managers. Advanced undergraduate and graduate students from the Mechanical and Aerospace Engineering Department at NCSU with experienced faculty conduct a one-day assessment of the facility. Data on plant operations and energy costs are collected and analyzed to determine potential conservation measures.

### For More Information:

http://www.ncsc.ncsu.edu/NCSU\_IAC.php

**Sponsor:** North Carolina Solar Center **Sponsor Type:** Nonprofit

### Natural Gas Builders Incentive Program

The CRMPU Department is offering an innovative program to encourage Rocky Mount and Nashville-area builders to install natural gas heating systems, water heaters, ranges, and clothes dryers in new construction for residential, commercial, and industrial buildings outside the existing City of Rocky Mount electric territory. The program is also available to customers converting or replacing an appliance from an energy source other than the city's electric system.

### For More Information:

http://www.rockymountnc.gov/utilities/gasincentives.html

Sponsor: City of Rocky Mount Utility

**Sponsor Type:** Utility

### **Net Metering**

The North Carolina Utilities
Commission requires the state's three investor-owned utilities—Duke Energy, Progress Energy and Dominion North Carolina Power—to make net metering available to customers that own and operate systems that generate electricity using solar energy, wind energy, hydropower, ocean or wave energy, biomass resources, waste heat derived from eligible renewable resources, or hydrogen derived from eligible renewable resources. The individual system capacity limit is 1 MW.

### For More Information:

http://www.dsireusa.org/documents/ Incentives/NC05Rd.pdf

Sponsor: North Carolina Utilities

Commission

Sponsor Type: State

### **Power Quality**

EnergyUnited's Power Quality experts can perform assessments and provide equipment to help ensure disturbancefree power to sensitive computer and other electronic equipment.

### For More Information:

http://www.energyunited.com/power\_ quality.asp

**Sponsor:** EnergyUnited **Sponsor Type:** Utility

### **Programs and Services**

Piedmont offers its customers financing for switching to natural gas and technical services.

For More Information:

http://www.piedmontng.com/commercial/programs?section=comm

**Sponsor:** Piedmont Natural Gas

Sponsor Type: Utility

### Self Assessment Guide

The purpose of this guide is to encourage leaders to engage their organizations in striving for more efficient use of energy resources, thereby improving financial performance, pursuing cleaner air, and reducing dependency on foreign energy. Upgrading organizational performance increases productivity and improves safety.

#### For More Information:

http://wastereductionpartners.org/ images/stories/guides\_and\_fact\_ sheets/self-assessment\_guide.pdf

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

### Strategic Energy Planning

Whether large or small, all organizations can benefit through some form of energy management planning. WRP professionals will share their expertise in helping clients craft an energy plan appropriate for their needs.

### For More Information:

http://wastereductionpartners.org/ index.php?option=com\_content&vie w=article&id=59%3Astrategy-energyplanning&catid=2&Itemid=12

Sponsor: North Carolina Waste

Reduction Partners **Sponsor Type:** Other

### Waste Reduction and Energy Savings Programs

The North Carolina Division of Pollution Prevention and Environmental Assistance is a clearinghouse of information about preventing pollution, conserving resources and reducing waste. Receive confidential, no-cost technical assistance including online information referrals, libraries of technical documents, core references for many industrial sectors, training courses, and toll-free information hotlines.

### For More Information:

http://www.nccommerce. com/en/BusinessServices/ SupportYourBusiness/ ProductivityAndEfficiencyPrograms/ index.htm

**Sponsor:** North Carolina Department

of Commerce **Sponsor Type:** State

### **Energy Efficiency Projects**

The utility's sister company, Constellation Energy Projects & Services Group, helps commercial customers develop solutions to achieve energy goals.

### For More Information:

http://www.newenergy.com/portal/ site/menuitem.1b1af2559c566632782c 7883da6176a0

Sponsor: Constellation NewEnergy

Sponsor Type: Utility

# **Load Management**

### **Commercial Energy Tools**

These tools include a commercial energy adviser, a commercial calculator, and a commercial energy systems library.

### For More Information:

http://www.union-power.com/
comTools.aspx

**Sponsor:** Union Power Co. **Sponsor Type:** Utility

### **Demand Response**

Hess Demand Response offers customers an opportunity to generate recurring revenue. Customers earn money by committing to reduce electricity usage the few times a year when their local power grid is at its peak, or when there is a significant spike in energy prices. For this commitment to reduce usage, Hess will pay customers every month. When they fulfill their commitment during a demand response event, Hess will pay them even more.

### For More Information:

http://www.hessenergy.com/products/electricity/DR.aspx

**Sponsor:** Hess Energy **Sponsor Type:** Other

# Dominion Business Energy Calculator

By using the Business Energy Calculator, customers can help to find ways to save year-round on electricity or gas bills.

### For More Information:

http://www.energyguide.com/energysmartsbe/welcomeba.asp?referrerid=244&sid=436

**Sponsor:** Dominion Power **Sponsor Type:** Utility

### **Electric \$ave**

Customers can save up to \$40 annually if they participate in the utility's load management program. In order to participate, a customer must voluntarily power down high-energy appliances during peak hours.

#### For More Information:

http://www.selma-nc.com/index. asp?Type=B\_BASIC&SEC={E1629C4F-361B-4CE4-8D53-54275945F903}&DE={6F3EB474-528B-4571-913B-C8D3103F4307}

Sponsor: Selma Electric Department

Sponsor Type: Utility

### **Electric Service Needs**

Lexington, along with ElectriCities, will assist a company or business by providing competitive rate options and programs that provide low and competitive costs for electric service. Services include energy efficiency studies, power audits, and peak load management recommendations.

### For More Information:

http://www.lexingtonnc.net/EconDev/econdev1.asp?id=utilities

Sponsor: City of Lexington Electric

Jtility

Sponsor Type: Utility

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### For More Information:

http://www.ncsc.ncsu.edu/ energyefficiencyonedayworkshops.php

Sponsor: North Carolina Solar Center

Sponsor Type: Nonprofit

### High Efficiency Small General Service

This discounted rate is available to commercial customers for buildings that meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification or equivalent.

### For More Information:

http://www.psncenergy.com/en/ small-to-medium-business/customerservice-center/rate-plans/default. htm#discount

**Sponsor:** PSNC Energy **Sponsor Type:** Utility

### Load Management

Customers with energy efficient HVAC systems receive a monthly \$4 credit, while customers with electric water heaters receive a \$2 credit. In order to be eligible for these credits, a customer must participate in the utility's load reduction program, which temporarily shuts off these appliances during high-usage periods.

### For More Information:

http://www.farmville-nc.com/departments utilities electric.htm

**Sponsor:** Town of Farmville **Sponsor Type:** Utility

### **Load Management - Electric**

If a customer installs a load management switch on a new electric water heater, the customer receives a \$150 rebate from the utility. The utility is then allowed to power down the high-energy appliance during peak use times.

### For More Information:

http://www.monroenc.org/services.php?cat=148

**Sponsor:** City of Monroe **Sponsor Type:** Utility

### **Load Management - Gas**

If a customer installs a load management switch on a new gas water heater, the customer receives a \$200 rebate from the utility. The utility is then allowed to power down the high-energy appliance during peak use times.

### For More Information:

http://www.monroenc.org/services.php?cat=181

**Sponsor:** City of Monroe **Sponsor Type:** Utility

### Load Reduction Credit Rider

The utility offers nonresidential customers a credit on their electric bill if they voluntarily agree to reduce demand during peak hours.

### For More Information:

http://www.lexingtonnc.net/ publicutilities/downloads/Load%20 Reduction%20Credit%20Rider.pdf

**Sponsor:** City of Lexington Electric Utility

Sponsor Type: Utility

# Constellation NewEnergy Online

This is an energy-management tool that is available to all electricity customers free of charge. The tool allows customers to find opportunities to improve their company's energy efficiencies, track changes in their company's usage, and compare usage across multiple facilities.

### For More Information:

http://www.newenergy.com/portal/site/menuitem.987b194dd5e782ce18a8 05e4da6176a0

Sponsor: Constellation NewEnergy

Sponsor Type: Utility

### **Energy Efficiency Projects**

The utility's sister company, Constellation Energy Projects & Services Group, helps commercial customers develop solutions to achieve energy goals.

### For More Information:

http://www.newenergy.com/portal/ site/menuitem.1b1af2559c566632782c 7883da6176a0

**Sponsor:** Constellation NewEnergy

**Sponsor Type:** Utility

# Load Response for your Business

Commercial customers can receive financial rewards, either in the form of dollars or energy bill credits, for using less energy on days when regional power grids are under stress.

### For More Information:

http://www.newenergy.com/portal/ site/cne/menuitem.c2d5c4a31e3b3661 571c5010747176a0?title=lr

**Sponsor:** Constellation NewEnergy

Sponsor Type: Utility

# **End Notes**

- <sup>1</sup> U.S. Department of Energy, Industrial Technologies Program, State and Regional Partnerships, "Industrial Technologies Program Activities in North Carolina." <a href="http://www1.eere.energy.gov/industry/states/state\_activities/map\_new.asp?stid=NC">http://www1.eere.energy.gov/industry/states/state\_activities/map\_new.asp?stid=NC</a>.
- <sup>2</sup> Energy Information Administration, "State/Territory Energy Profiles," Accessed October 4, 2010. http://tonto.eia.doe.gov/state/state\_energy\_profiles.cfm?sid=NC.

# **EERE Information Center**

1-877-EERE-INFO (1-877-337-3463)

www.eere.energy.gov/informationcenter

