

## North Carolina Industrial Resource Fact Sheet

### Introduction

North Carolina's economy is ranked 9th in the nation in terms of 2008 gross domestic product (GDP), generating \$400.2 billion annually. Industrial manufacturing is a vital sector of North Carolina's economy providing the state with 80,938 jobs and supplying \$84,989 million worth of goods. Based on total value of shipments, North Carolina's largest manufacturing sectors are chemical and food manufacturing. In 2007, North Carolina's industrial sector ranked 13th in the nation in terms of energy expended accounting for 643.7 trillion British thermal units (Btu) or 23.8 percent of statewide energy consumption. The state's industrial natural gas consumption totaled 91.7 trillion Btu, ranking 22nd in the nation. Moreover, the industrial sector accounted for approximately 15.9 million metric tons of carbon dioxide emissions, according to 2005 data.

In 2007, the state government created a *Climate Action Plan*, where state leaders called for increased investment in energy efficiency and encouraged the expansion of energy efficiency funds and energy efficiency programs for industry. North Carolina also enacted legislation to create new energy programs, such as the North Carolina Utility Commission's renewable energy and energy efficiency portfolio standard; this program requires electric power suppliers to increase renewable energy power generation by 3 percent and obtain energy efficiency savings of 3 percent of prior-year electricity sales in 2012, 6 percent in 2015, 10 percent in 2018, and 12.5 percent in 2021.

Additionally, the state government passed General Statutes 143 345.18 to establish a revolving fund to encourage businesses to invest in energy-efficient capital improvements and Senate Bill 1597 that



authorized county governments and municipalities to provide incentives for reducing energy consumption in new construction. Some cities, such as Charlotte, are developing strategies to address Senate Bill 1597, as well as determine how to lower energy consumption in existing buildings as well. In addition, plant managers can obtain energy efficiency information or assistance in financing energy efficient improvements at their facilities through numerous other resources.

### State Programs

*State Government:* The North Carolina State Energy Office (NCSEC) has been active in promoting industrial energy efficiency efforts. Examples of programs instituted by the NCSEC include the Energy Management Program and Industries of the Future. The Energy Management Program provides workshops and energy surveys to industrial operators within the state, which supply valuable information on a wide range of energy-use related topics. The NCSEC reports that the Energy Management Program has saved more than \$170 million in energy spending since its inception. The 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, including the mining, agriculture, glass, wood products, chemicals, and metals industries. Additionally, the state offers tax credits for implementing renewable energy installations and provides loans for energy efficient and renewable energy projects.

### Utility Resources

*Power Administration:* The Tennessee Valley Authority (TVA), through its many affiliates, rewards customers that install renewable energy systems by purchasing the power generated from those installations at a premium rate.

*Investor-Owned Utilities:* The Tennessee Valley Authority (TVA), through its many affiliates, rewards customers that install renewable energy systems by purchasing the power generated from those installations at a premium rate.

*Public Power Utilities:* Quite a few of North Carolina's public electric utilities provide energy saving programs for industrial customers. For a detailed breakdown of incentive programs by program type, please refer to the following table.

## INDUSTRIAL TECHNOLOGIES PROGRAM

NAME OF IOU	ANALYSIS TOOLS	CLEAN ENERGY INCENTIVE	ENERGY AUDITS	LOAD MANAGEMENT	LOANS/ GRANTS	REBATES
City of Albemarle Electric Utility	X		X			X
City of Gastonia Electric Utility						X
City of Lexington Electric Utility		X				X
City of Monroe				X		
City of Rocky Mount Utility		X				
City of Statesville Electric Utility						X
City of Wilson	X	X			X	
EnergyUnited			X			
Town of Apex Utility		X				
Town of Farmville				X		
Town of Granite Falls						X

*Electric Cooperatives:* Within the state of North Carolina, there are multiple electric cooperatives that offer industrial customers incentives aimed at increasing energy efficiency. The following table is a detailed breakdown of incentive programs by program type.

### Regional Resources

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

*Clean Energy Application Center:* The U.S. DOE's Southeast Clean Energy Application Center provides application assistance, technology information, and the educational support necessary to promote Combined Heat and Power, District Energy, and Waste Energy Recovery.

### Local Resources

*Nonprofit Organizations:* Created by the approval of the North Carolina Utilities Commission, NC GreenPower is a nonprofit organization that offers incentives on renewable energy generation. NC GreenPower is the first statewide green energy program in the nation supported by 100 percent of the state's utilities; the program is administered by Advanced Energy, an independent nonprofit corporation located in

NAME OF IOU	ANALYSIS TOOLS	ENERGY AUDITS	LOANS/ GRANTS	REBATES
Albemarle Electric Membership Corporation		X		
Blue Ridge Electric Membership Corporation		X		
Greenville Utilities	X	X		
Halifax Electric Membership Corporation				X
Pee Dee Electric				X
Piedmont Electric Membership Corporation				X
Roanoke Electric Corporation			X	
Selma Electric Department				X
Surry Yadkin Electric Membership Corporation		X		
Tideland Electric Membership Corporation			X	
Tri-state Electric Membership Corporation				X

# INDUSTRIAL TECHNOLOGIES PROGRAM

Raleigh. Additionally, the Center for Energy Research and Technology, housed at the North Carolina A&T State University, provides education, training, demonstration, and technical assistance for energy and environmental technologies.

*Industrial Assessment Centers:* The North Carolina State University, with sponsorship from the Department of Energy, hosts an Industrial Assessment Center (IAC) that offers small to midsize manufacturers with energy assessments.

*Manufacturing Extension Partnership:* The North Carolina Manufacturing Extension Partnership (MEP) works directly with 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 - North Carolina ([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))

ITP State Incentives and Resources Database ([http://www1.eere.energy.gov/industry/about/state\\_activities/incentive\\_search.asp](http://www1.eere.energy.gov/industry/about/state_activities/incentive_search.asp))

Energy Efficient Upgrades (<http://www.business.gov/expand/green-business/energy-efficiency/upgrades/office-equipment.html>)

State of North Carolina ([http://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter\\_105/GS\\_105-277.html](http://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter_105/GS_105-277.html))

Tennessee Valley Authority (<http://www.gpsgenpartners.com/>)

Albemarle Electric Membership Corporation (<http://www.albemarle-emc.com/energyaudit.html>)

Blue Ridge Electric Membership Corporation ([http://www.blueridgeemc.com/business-services/efficient\\_lighting.asp](http://www.blueridgeemc.com/business-services/efficient_lighting.asp))

Center for Energy Research and Technology (<http://cert.ncat.edu/>)

City of Albemarle ([http://www.ci.albemarle.nc.us/pe\\_electric\\_usage.htm](http://www.ci.albemarle.nc.us/pe_electric_usage.htm))

City of Gastonia ([http://www.cityofgastonia.com/city\\_serv/electric/rebate/rebate.cfm](http://www.cityofgastonia.com/city_serv/electric/rebate/rebate.cfm))

City of Lexington Electric Utility (<http://www.lexingtonnc.net/>)

City of Monroe ([http://www.monroenc.org/Energy\\_percent20Svc/electric.htm](http://www.monroenc.org/Energy_percent20Svc/electric.htm))

City of Rocky Mount Utility (<http://www.rockymountnc.gov/utilities/renewableenergy.html>)

City of Statesville Electric Utility ([http://www.ci.statesville.nc.us/index.php/content/?cgi-bin=0&session\\_id=87ae2af811f9afd7abd008c4c29b33d&id=161](http://www.ci.statesville.nc.us/index.php/content/?cgi-bin=0&session_id=87ae2af811f9afd7abd008c4c29b33d&id=161))

City of Wilson (<http://www.wilsonnc.org/departments/wilsonenergy/cityofwilsonrenewableenergyprogram>)

Duke Energy (<http://www.duke-energy.com/south-carolina-business/energy-management.asp>)

Dominion Power (<http://www.dom.com/customer/efficiency/bus/index.jsp>)

EnergyUnited ([http://www.energyunited.com/energy\\_efficiency.asp](http://www.energyunited.com/energy_efficiency.asp))

Greenville Utilities (<http://www.guc.com/residential/energyservices.aspx#survey>)

Halifax Electric Membership Corporation (<http://www.halifaxemc.com/Rebates.html>)

NC GreenPower ([http://www.ncgreenpower.org/resources/current\\_requests.html](http://www.ncgreenpower.org/resources/current_requests.html))

Pee Dee Electric (<http://www.pdemc.com/heatpump.asp>)

Piedmont Electric Membership Corporation (<http://www.pemc.org/rebates.php>)

Progress Energy- Carolina (<http://www.progress-energy.com/custservice/carbusiness/efficiency/programs/eebiz/index.asp>)

Roanoke Electric Cooperative (<http://www.roanokeelectric.com/comind.aspx>)

Selma Electric Department (<http://www.selma-nc.com/index.asp>)

SEEA (<http://www.seealliance.org>)

Surry Yadkin Electric Membership Corporation ([http://www.syemc.com/index.php?option=com\\_content&task=view&id=17&Itemid=37](http://www.syemc.com/index.php?option=com_content&task=view&id=17&Itemid=37))

Tideland Electric Membership Corporation (<http://www.tidelandemc.com/p&sincentives.htm>)

Tri-State Electric Membership ([http://tsemc.net/tsemc\\_rebates.html](http://tsemc.net/tsemc_rebates.html))

Town of Apex Utility (<http://www.apexnc.org/>)

Town of Farmville ([http://www.farmville-nc.com/departments\\_utilities\\_electric.htm](http://www.farmville-nc.com/departments_utilities_electric.htm))

Town of Granite Falls (<http://www.granitefallsncc.com/electric.html>)

## Contacts

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*Manufacturing Extension Partnership in*  
*North Carolina*

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Source: <http://blue.nist.gov/centers/NC>

*Clean Energy Application Center for Region*

Southeast CHP Application Center

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E-mail: [chamra@me.msstate.edu](mailto:chamra@me.msstate.edu)

Web site: <http://www.chpcenterse.org/>

Source: [http://www.eere.energy.gov/de/chp/chp\\_applications/chp\\_application\\_centers.html](http://www.eere.energy.gov/de/chp/chp_applications/chp_application_centers.html)

U.S. DOE's Southeast Clean Energy Application  
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Web site: <http://www.chpcenterse.org>

Source: [http://www.eere.energy.gov/de/chp/chp\\_applications/chp\\_application\\_centers.html](http://www.eere.energy.gov/de/chp/chp_applications/chp_application_centers.html)

*DOE Regional Contact*

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Source: <http://www.eere.energy.gov/industry/about/contacts.html>

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[www.eere.energy.gov/informationcenter](http://www.eere.energy.gov/informationcenter)