



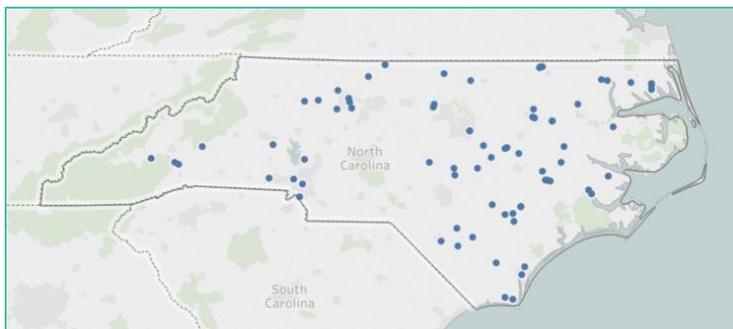
## Combined Heat and Power (CHP) Snapshots – North Carolina

### Southeast CHP Technical Assistance Partnership (TAP) Quick Facts

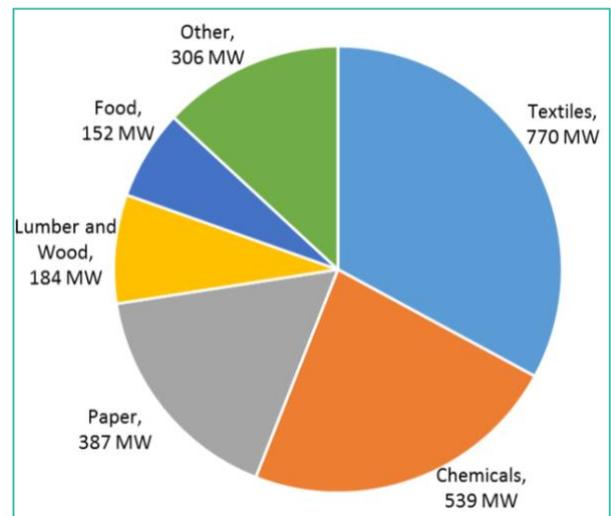
- The Southeast CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the Southeast.
- The Southeast CHP TAP serves the Southeastern states of Alabama, Florida, Georgia, Kentucky, Mississippi, **North Carolina**, South Carolina, and Tennessee.

State	Number of Current Sites	Total CHP Capacity (MW) Deployment	Number of Potential Sites	Total CHP Technical Potential (MW)	CHP TAP Activities (2014-2017)		
					Technical Assistance	End-User Education	Policymaker Education
Alabama	40	3,270	4,512	2,777	10	3	3
Florida	44	1,403	9,374	5,110	8	5	1
Georgia	68	3,276	17,823	6,968	9	3	4
Kentucky	11	142	4,030	2,721	33	9	5
Mississippi	23	527	2,629	1,833	8	1	4
<b>North Carolina</b>	<b>73</b>	<b>1,511</b>	<b>8,437</b>	<b>4,352</b>	<b>64</b>	<b>14</b>	<b>21</b>
South Carolina	28	1,381	4,273	3,063	23	5	7
Tennessee	22	971	6,134	4,183	51	6	2
<b>Total</b>	<b>309</b>	<b>12,481</b>	<b>57,212</b>	<b>31,007</b>	<b>206</b>	<b>46</b>	<b>47</b>

### North Carolina CHP Installations



### CHP Technical Potential by Industrial Sector





## North Carolina CHP Project Snapshots

- ◆ **North Carolina State University (Raleigh, NC)** – North Carolina State installed a CHP system in 2012 to cut down on energy costs and improve power reliability for the campus. The 11 MW CHP system has improved the efficiency of electricity and steam generation on campus by 35%, while also providing increased reliability during grid power outages. The system has reduced both power plant operating costs and overall energy costs for NCSU, and created 89 jobs during the construction and installation of the CHP system.
- ◆ **Wellons Energy Solutions/Perdue Agribusiness (Cofield, NC)** – Wellons Energy Solutions built a 495 kW biomass-fueled CHP system for the Perdue Agribusiness Cofield feed mill in 2011. The CHP system uses locally-sourced biomass to produce steam for the Perdue facility and electricity for both the mill and export to the electric grid. The CHP system has significantly reduced energy costs and allowed the mill to focus on improving its core business and operations.

## Testimonials from CHP TAP Beneficiaries in the Southeast

“Thank you for the DOE Southeast CHP TAP’s help in the preliminary evaluation of our CHP system at our Columbia, SC plant. Shaw Industries has found incredible value in the CHP Technical Assistance Program, the positive output of the report was the starting point for our project... The work done by your team demonstrated the viability of this project in measurable ways... This study showed viability without initial investment on our part, it has been a positive factor in getting this project approved and under way!”

*Kurt Kniss, P.E., C.E.M.  
Shaw Industries  
Columbia, SC*

“It was a real pleasure for the opportunity to work with the DOE Southeast CHP TAP on evaluating CHP for Bridgestone America’s portfolio of manufacturing facilities... Combined heat and power is a technology that we are working to investigate continuously at our plants due to the economic savings, environmental performance and energy resiliency benefits it can deliver. As a result of the CHP TAP’s preliminary evaluation efforts, we have been pursuing a CHP opportunity at our Warren, Tennessee plant, by engaging an engineering firm for further study as well as entering into discussions with our electric utility on supporting the project.”

*Muneer Chowdhury, Energy and Environmental Efficiency Manager  
Bridgestone Americas, Inc.  
Warren, TN*

## Southeast CHP TAP Contact:

Isaac Panzarella, Assistant Director, NC Clean Energy Technology Center  
919-515-0354, [ipanzar@ncsu.edu](mailto:ipanzar@ncsu.edu)

<sup>1</sup> U.S. DOE, December 2016, “Combined Heat and Power Installation Database” (<https://doe.icfwebservices.com/chpdb/>).

<sup>2</sup> U.S. DOE, March 2016, “Combined Heat and Power (CHP) Technical Potential in the United States” (<https://energy.gov/eere/amo/downloads/new-release-us-doe-analysis-combined-heat-and-power-chp-technical-potential>).