



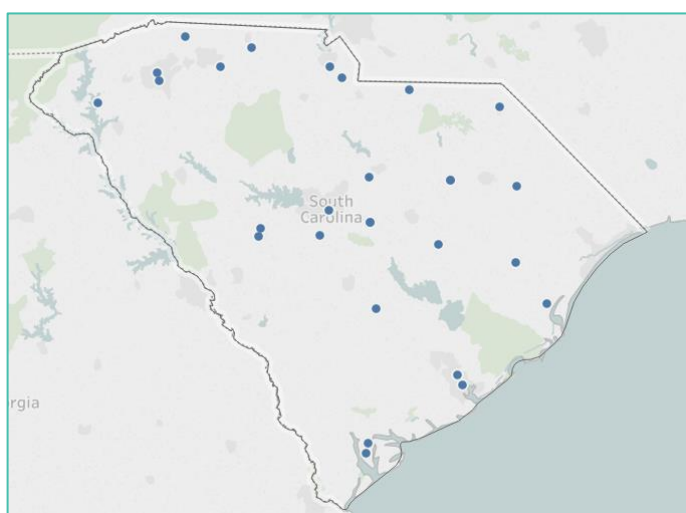
Combined Heat and Power (CHP) Snapshots – South Carolina

Southeast CHP Technical Assistance Partnership (TAP) Quick Facts

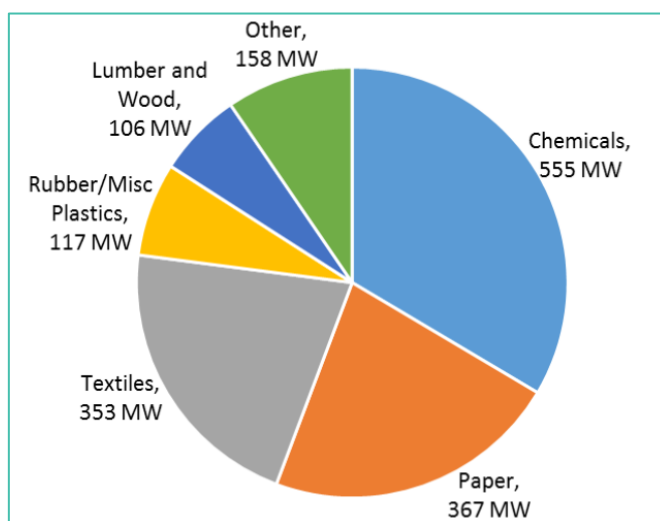
- The Southeast CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the Southeast.
- The Southeast CHP TAP serves the Southeastern states of Alabama, Florida, Georgia, Kentucky, Mississippi, North 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
North Carolina	73	1,511	8,437	4,352	64	14	21
South Carolina	28	1,381	4,273	3,063	23	5	7
Tennessee	22	971	6,134	4,183	51	6	2
Total	309	12,481	57,212	31,007	206	46	47

South Carolina CHP Installations



CHP Technical Potential by Industrial Sector





South Carolina CHP Project Snapshots

- ◆ **Savannah River National Laboratory (SRNL) – (Aiken, SC)** – SRNL is the only complete nuclear material management facility in the U.S. In 2012 it installed a 20 MW CHP system that is powered by locally sourced wood and tire waste. The CHP system provides all of the thermal requirements for the facility, and saves SRNL over \$34 million per year on energy costs. The system is expected to generate \$944 million in energy, water, and operations and maintenance savings over the lifetime of the project.
- ◆ **Columbia Energy Center (Gaston, SC)** – The Columbia Energy Center CHP system provides 606 MW of electricity to the local grid and steam to the nearby Eastman chemical plant. Purchasing steam from the Energy Center has greatly increased the operational efficiency of the Eastman facility and provided significant energy savings. The construction of the facility led to 200 part-time jobs and 25 full-time positions, and over \$100 million was spent locally on construction materials and services, providing a significant boost for the local economy.

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 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:

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

² 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>).