

Combined Heat and Power (CHP) Snapshots – Texas

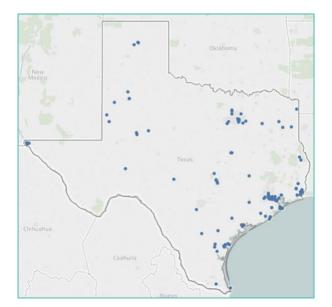
South-Central CHP Technical Assistance Partnership (TAP) Quick Facts

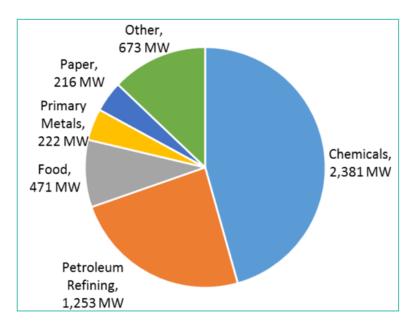
- The South-Central CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the central southern region of the U.S.
- The South-Central CHP TAP serves the states of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

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
Arkansas	17	654	2,664	1,795	7	0	2
Louisiana	65	6,881	4,437	4,946	7	3	0
New Mexico	9	200	1,742	1,140	8	14	5
Oklahoma	10	546	3,397	1,916	13	6	5
Texas	130	17,612	20,855	14,062	139	30	20
Total	231	25,893	33,095	23,859	174	53	32

Texas CHP Installations

CHP Technical Potential by Industrial Sector







Texas CHP Project Snapshots

- Houston Methodist Hospital (Houston, TX) Known as a national leader in several specialties, the Houston Methodist Hospital installed an 11 MW CHP system in 2011 to support a major campus expansion. Although the initial costs for CHP were higher than a more traditional alternative (boilers, diesel generator, etc.), CHP was chosen because of its added energy security and reliability benefits. The two 4.6 MW gas turbines provide additional steam and cooling tower capacity and back-up power for the entire campus. They system has provided the hospital with an average of \$1.8 million in annual energy savings since its installation.
- O'Hair Shutters (Lubbock, TX) Facing rising electricity costs and increasing international competition, O'Hair Shutters, the largest domestic shutter manufacturer, uses CHP to reduce energy costs. After installing a 500 kW system in 2011, the family-owned company expanded its system to 1.5 MW in 2013 to meet 85% of the facility's electricity needs and provide hot water and heat for a paint drying process. The company has seen energy cost savings of more than \$40,000 per year since installing the CHP system.

Testimonials from CHP TAP Beneficiaries in Texas

The South-Central CHP TAP provided early stage screenings and/or studies to determine project feasability for the below projects:

"The [Southside Water Treatment Plant CHP] project has allowed Dallas to save money on its electrical costs and has increased reliability at the plant with another electrical feed. By utilizing a public-private partnership, the City was able to implement the project without additional capital to construct the facility or additional labor to operate and maintain the facility."

Richard Wagner Senior Program Manager, Southside Water Treatment Plant Dallas, TX

"Through the recovery of otherwise-wasted heat to produce high pressure steam for crude oil processing, Port Arthur Steam Energy LLP has demonstrated exceptional leadership in energy use and management."

U.S. Environmental Protection Agency, in giving the 2010 Energy Star Award to Port Arthur Steam Port Arthur, TX

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¹ U.S. DOE, December 2016, "Combined Heat and Power Installation Database" (<u>https://doe.icfwebservices.com/chpdb/</u>). ² U.S. DOE, March 2016, "Combined Heat and Power (CHP) Technical Potential in the United States" (<u>https://energy.gov/eere/amo/downloads/new-release-us-doe-analysis-combined-heat-and-power-chp-technical-potential</u>).