



# U.S. DEPARTMENT OF ENERGY CHP Technical Assistance Partnerships SOUTHEAST



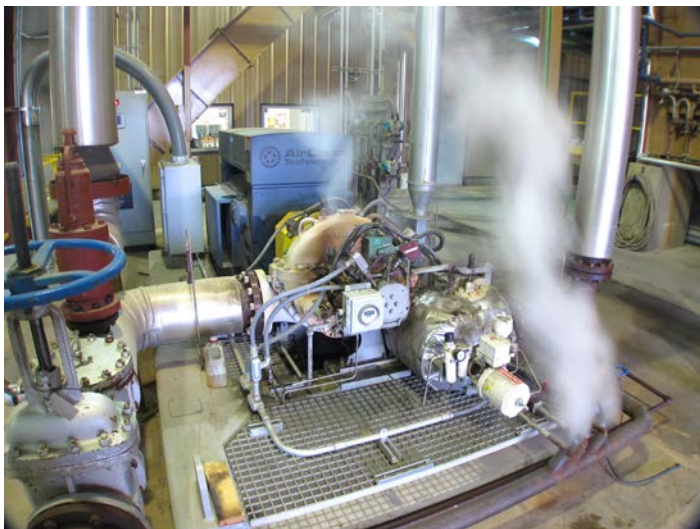
## About Us

The U.S. DOE Southeast Combined Heat and Power Technical Assistance Partnership (CHP TAP) is one of seven regional CHP TAPs formed by the U.S. Department of Energy to promote and assist in transforming the market for CHP, waste heat recovery, and district energy technologies and concepts throughout the United States. Together with our project partners, we serve ten Southeastern states.

### CHP Target

Working with a wide range of stakeholders, the U.S. DOE Southeast CHP TAP, formerly known as the Southeast Clean Energy Application Center, has helped the U.S. to nearly double the installed CHP capacity from 46 GW in 2000 to 84 GW in 2010.

Now, there is a new goal: 40 GW of new CHP by 2020, as stated in the Executive Order of August 30, 2012 -- Accelerating Investment in Industrial Energy Efficiency.



CHP systems are based on prime movers such that produce electricity such as this backpressure steam turbine and generator; thermal energy from the outlet of the turbine is recovered for useful purposes. Other prime movers include reciprocating engines or combustion turbines.

## Our Services

### Technical Assistance and Project Support

We provide technical information to energy end-users and others to help them consider if CHP, waste heat recovery or district energy makes sense for them. Services include:

- Qualification Screenings and Feasibility Analyses from our staff to help determine if a CHP project is a good fit for your site. Screenings can be done either on-site or remotely. Any industrial, commercial or institutional site is eligible.
- Expert advice as you proceed with project development.
- Installation and implementation concerns; utility, emissions, and siting issues.
- Third-party review of vendor proposals.
- Information on any available grants or incentives.
- Case studies of similar businesses that have installed CHP.
- Research of business climate and CHP market potential in key economic sectors.

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Renewable Energy  
ADVANCED MANUFACTURING OFFICE

## Education and Outreach

The U.S. DOE Southeast CHP Technical Assistance Partnership develops case studies, fact sheets, technology briefs, sector-by-sector information, and other resources on the benefits and applications of CHP for state and local policy makers, regulators, energy end-users, trade associations, and others. We also organize or support outreach through presentations, webinars or workshops for particular market sectors or stakeholder groups with interest in CHP.

## Market Assessments

Analysis of CHP market potential in diverse sectors such as health care, industrial sites, hotels, and new commercial and institutional buildings, as well as strategic market areas including biomass, military and critical infrastructure.

## What are CHP, District Energy, and Waste Heat Recovery?

**Combined Heat and Power (CHP)** is... an efficient and clean approach to generating electric power and useful thermal energy from a single fuel source at the point of use. Every CHP application involves the recovery of otherwise-wasted thermal energy to produce cooling, heating or process thermal energy or electricity, improving energy efficiency and reducing greenhouse gas (GHG) emissions. CHP already supplies over 10% of our nation's electricity, and can and should supply more.

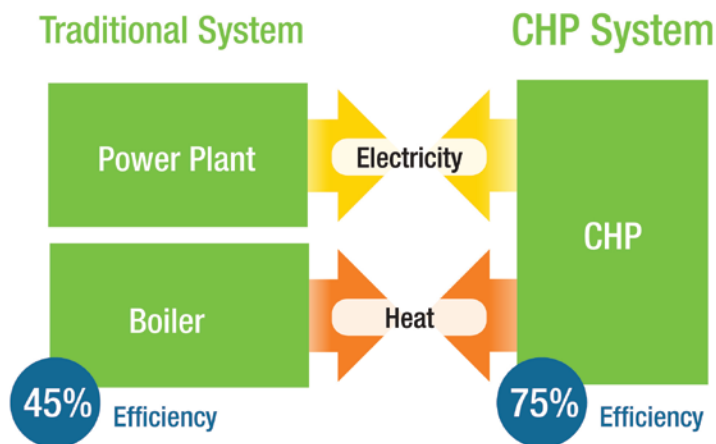
**District Energy** is... CHP, heating, and/or cooling applied to an entire university, office park, medical campus, mixed use sustainable development, or downtown. Over 400 building networks in the U.S. already use district energy, and the number is on the rise.

**Waste Heat Recovery or Waste Heat to Power CHP** is... capturing waste heat that an industrial site or pipeline compressor station is already emitting, and producing electricity with no additional fuel input or emissions output.

### Where are these technologies used?

Many industrial, commercial, institutional and agricultural operations have the right characteristics for CHP, including:

- Chemical manufacturing
- Data centers
- Food Processing
- Hotels and casinos
- Hospitals
- Landfills
- Office buildings
- Pulp and paper
- Universities
- Wastewater treatment



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*Project partners include the International District Energy Association, the Kentucky Department of Energy Development and Independence, the National Association of State Energy Officials and the North Carolina State Energy Office*

U.S. DOE Southeast Combined Heat and Power Technical Assistance Partnership  
[www.southeastCHPTAP.org](http://www.southeastCHPTAP.org)

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