# Combined Heat and Power (CHP) Deployment

## **CHP Deployment Program**

Combined heat and power (CHP) is an efficient and clean approach to generating on-site electric power and useful thermal energy from a single fuel source. Instead of purchasing electricity from the distribution grid and burning fuel in an on-site furnace or boiler to produce thermal energy, CHP provides both energy services to a facility in one energy-efficient step.

CHP is a suite of commercially available, predominate gas-fired distributed generation technologies that produc both electricity and thermal energy on-site, thereby reducing line losses and strain on grid infrastructure while also increasing energy efficiency, reliability, and security. The promotion of CHP is part of the EERE mission to create and sustain American leadership in the transition to a strong and prosperous America powered by domestic, affordable, and secure energy for the industrial, manufacturing, federal, institutional, commercial and multifamily sectors.

### Key services include:

- Market Analysis Supporting analyses of CHP market opportunities in diverse markets including industrial, federal, institutional, and commercial sectors:
  - Publications such as CHP Technical Potential in the United States, at energy.gov/chp-potential and a CHP Technology Fact Sheet series, at energy.gov/ chp-technologies
  - The DOE CHP Installation Database, at energy. gov/chp-installs, provides information about CHP systems currently operating in the United States including locations, organizations served, and facility characteristics.
  - CHP Project Profiles are two-page summaries of "real world" examples of CHP projects actively providing electricity and thermal energy to their owners/ operators. Read about how these projects are working via a user-friendly database at energy.gov/chp-projects



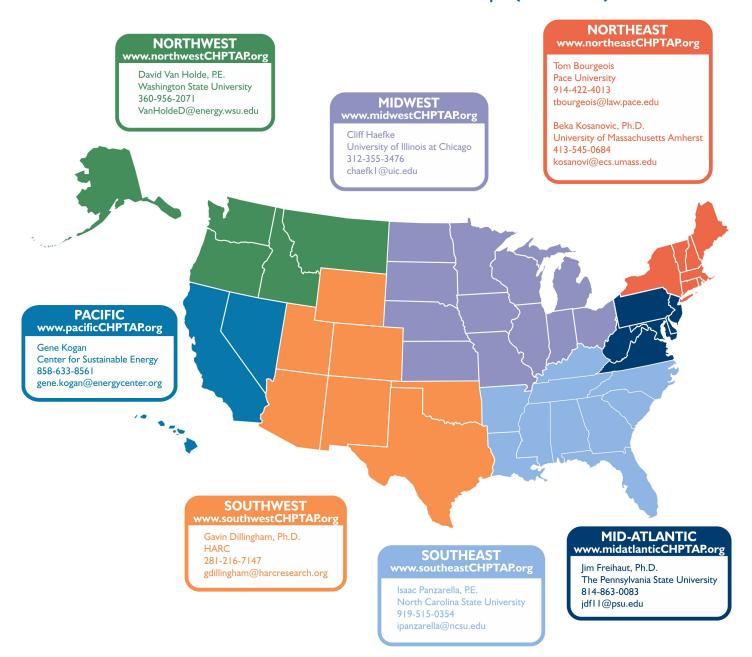
- Market Engagement Supporting cities, states, utilities and other entities to design and implement CHP programs based on market analysis and portfolio assessment of CHP buildings/facilities for short-, mid- and long-term investment opportunities.
- **Technical Assistance** Promote and assist in transforming the market for CHP, waste heat to power, microgrids, and district energy with CHP throughout the United States through DOE's CHP TAPs¹ by:
  - Providing neutral third-party technical assistance to help end-users explore the feasibility of CHP.
  - Providing education and outreach on the energy and non-energy benefits and applications of CHP to state and local policy makers, regulators, energy end-users, trade associations and others.
  - Supporting analyses of CHP market opportunities in diverse markets.
  - Visit energy.gov/chp-contacts to identify your CHP TAP
- CHP for Resiliency Accelerator Collaborating with Partners to support consideration of CHP and other distributed generation solutions for critical infrastructure resiliency planning at the state, local, and utility levels, at betterbuildingsinitiative.energy.gov/accelerators/ combined-heat-and-power-resiliency

#### • Packaged CHP System Challenge [in development]

Increase CHP deployment in underdeveloped markets with standardized, DOE-recognized packaged CHP systems transforming the marketplace by reducing risk and uncertainty; driven by strong end-user engagement via Market Mover Partners, such as cities, states, and utilities. ■

<sup>&</sup>lt;sup>1</sup> Detailed CHP TAP contact information found on reverse side of this sheet or at energy.gov/chp-contacts

#### **DOE CHP Technical Assistance Partnerships (CHP TAPs)**



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For more information, visit the CHP Deployment Program at energy.gov/chp or email us at CHP@ee.doe.gov