CHP
EPA COMBINED HEAT AND POWER PARTNERSHIP

Promoting CHP's Environmental, Economic and Resiliency Benefits

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Federal Government Context

- Executive Order 13624: "Accelerating Industrial Energy Efficiency"
- Interagency cooperation, primarily EPA and DOE
  - State and Local Energy Efficiency (SEE) Action Network–*Guide to the Successful Implementation of State CHP Policies." (March 2013)*
  - "CHP: A Clean Energy Solution" – joint publication (August 2012)
- DOE Activities
  - Organizing Regional Industrial EE & CHP Dialogues - focus on state best practice policies and investment models that address multiple barriers
  - Supporting Clean Energy Application Centers that provide regional context to CHP activities including technical assistance and policy support
  - Working with National Governor's Association to better understand state CHP barriers
  - Issued new report on CHP enabling resilient energy infrastructure for critical facilities (March 2013)
- EPA supports industrial energy efficiency and CHP through partnership programs (ENERGY STAR and CHP Partnership)

Combined Heat & Power (CHP) Partnership

- Supports development of new CHP projects with credible and unbiased technical expertise
- Through 2012, CHPP industry partners worked on more than 770 CHP projects representing 5,700 MW of new installed capacity
  - Over 480 Partners - developers, end users, engineers/consultants, manufacturers, state/local governments
- Targets key regulatory, utility and information barriers
- Offers trusted tools and guidance, ENERGY STAR CHP Awards, technical assistance
- Supports EO 13624 through work on air regulations, facilitating sharing of state best practices, and project development

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CHP Environmental Benefits

- What are the challenges?
  - Emissions reductions occur primarily offsite
  - Traditional air permitting uses fuel inputs rather than combustion outputs to establish limits
- What is EPA doing?
  - Offering CHP Emissions Calculator to assess emissions impact
  - Working within EPA to increase consideration of output-based limits in air regulations
  - Reaching out to state air permitting authorities to increase awareness of CHP and applicability of output-based limits

CHP Economic Benefits

- What are the challenges?
  - Upfront capital costs may make project financing difficult
  - Utility standby rates can negatively skew project economics
  - Payback periods usually longer than 3 years
- What is EPA doing?
  - Offers a CHP-central dCHPP database on funding incentives and policies
  - Provides project development tools - Spark Spread Estimator and Project Development Handbook
  - Works with DOE on CHP Guide to better understand standby rates and other utility barriers
  - Raises awareness of CHP as a productive investment

CHP Resiliency Benefits

- What are the challenges?
  - CHP systems still need to be sized to thermal load so may not be able to handle full electric demand
  - Growing but still limited awareness of CHP's contributions
  - CHP system must be in proper configuration to run independent of grid (adds to costs and complexity)
- What is EPA doing?
  - Publicizing CHP opportunities at WWTF, medical facilities, other critical infrastructure
  - Raising awareness of state policies that highlight CHP's role in supporting resiliency through NASEO CHP initiative and dCHPP