

Webinar on the Final Combined Heat and Power Action Plan

Q&A Responses

January 11, 2016

On October 27th, 2015, [Microgrid Institute](#) hosted a webinar to review highlights of [Commerce's Final Combined Heat and Power Action Plan](#), cover the report's main recommendations, and summarize next steps. Following the webinar, attendees submitted follow-up questions about the content of the Action Plan. This document provides Commerce's responses to the stakeholder questions that were submitted after the webinar.

Commerce will continue to disseminate information about combined heat and power (CHP) opportunities through updates to the [Department's CHP Stakeholder Engagement Webpage](#), including additional resources and ongoing communications about next steps established in the Final CHP Action Plan.

Questions and Answers

1. Could I get a copy of the power point, or is that on a web site somewhere?
 - **Commerce Response:** An expanded version of the webinar PowerPoint slides, news, and other resources related to the CHP Stakeholder Engagement Process will be posted to Commerce's [CHP Stakeholder Engagement Webpage](#).
2. How and who will be involved in determining which wastewater treatment facilities to [assess CHP implementation opportunities]?
 - **Commerce Response:** Commerce was awarded a Department of Energy (DOE) grant to help increase energy efficiency in Minnesota municipal wastewater treatment plants and scope opportunities for onsite power generation. As part of this three-year project, Commerce, the Minnesota Technical Assistance Program, and Minnesota Pollution Control Agency will help wastewater facilities lower operating costs through improved energy efficiency and provide up-to-date information to help facilities and city staff make informed decisions. Opportunities for CHP implementation at wastewater facilities will be assessed as part of this project. To learn more about this project and how you can participate, please visit the [project webpage](#).
3. One of the priorities listed [in the CHP Action Plan] was education on the part of CHP usage in wastewater facilities ... we work with municipalities across the state and could assist with that initiative if needed.

- **Commerce Response:** To explore opportunities for collaboration in the [DOE wastewater treatment project](#), please contact AJ Van den Berghe, MnTAP Engineer, at 612-624-4653 or vand0576@umn.edu
4. How will this CHP Action Plan connect to the developers interested in implementing new CHP projects?
- **Commerce Response:**
 - The purpose of the Action Plan is to summarize the key findings of Commerce’s CHP work, and to synthesize these findings to inform clear and achievable recommendations that could help lead to potential CHP implementation in Minnesota. Efforts outlined in the CHP Action Plan that might be of particular interest to project developers include the [CHP opportunity assessments at wastewater facilities](#) (see “Action Item II: Map CHP Opportunities at Wastewater Treatment Facilities and Public Facilities), and [exploring how to improve financing programs](#) to help implement CHP projects (see “Action Item IV: Leverage Existing Financing Programs Applicable to CHP.”).
 - Additionally, the [Midwest DOE CHP Technical Assistance Partnership](#) provides a wide variety of technical assistance resources that developers can take advantage of, including:
 - *Market Opportunity Analyses* – Supporting analyses of CHP market opportunities in diverse markets including industrial, federal, institutional, and commercial sectors.
 - *Education and Outreach* – Providing information on the energy/non-energy benefits and applications of CHP to state and local policy makers, regulators, energy end-users, trade associations and others.
 - *Technical Assistance* – Help end-users consider CHP, waste heat to power, and/or district energy with CHP in their facility, including assisting project development from initial CHP screening to installation.
 - *Contact Information* – Contact [Cliff Haefke](#) or [Graeme Miller](#) at the DOE’s Midwest CHP TAP for more information.
5. Is there funding available through the State Energy Agencies for conducting CHP feasibility studies?
- **Commerce Response:**
 - The [Midwest DOE CHP Technical Assistance Partnership](#) offers unbiased, non-commercial feasibility screenings to help determine if CHP, waste heat to power, or district energy is a good fit for your site, financially and

technically. They also provide other technical and regulatory assistance and advice.

- Additionally, below are some examples of financing program offerings that could be utilized for CHP projects. Funding for feasibility studies is available to public entities through the Public Entity Energy Audit and Renewable Energy Feasibility Study Loan Program. Please contact [Eric Rehm](#) with questions about the program and how facilities can qualify for a feasibility study.

	Guaranteed Energy Savings Program	Local Energy Efficiency Program	Energy Savings Partnership	Trillion Btu Program	Commercial - Property Assessed Clean Energy Program	Rev It Up Program
Eligibility (recipient)	State Agencies, Higher Ed, Local Governmental Units, K-12	Local Governmental Units, K-12	Local Governmental Units, K-12	Commercial and Industrial Businesses, 501 (c)(3) organizations	Commercial and Industrial Businesses, 501 (c)(3) organizations	Local Governmental Units, Commercial and Industrial Businesses, Small Businesses , Health Care Facilities, MHFA
Type	State Administered Energy Savings Performance Contracting Program	State Assisted Energy Study using Design-Bid-Build for implementation	Municipal Leasing Program (tax – exempt)	Revolving Loan Fund	Special Assessment (against property)	Revenue Bonds (tax-exempt or taxable; project dependent)
Project Size	Min. \$300k Max. none	Typically between \$50k and \$350k	Min. \$50k Max. none	Min. 10k Max. \$1M	Max. 20% of Assessed Property Value	Min. \$1M Max. \$20M
Term (years)	Up to 25	Up to 15	Up to 15	Up to 5	Up to 20	Up to 25
Interest Rate	Dependent upon financing instrument (eligible for lease purchase financing)	Dependent upon financing instrument (eligible for lease purchase financing)	Dependent upon issuance (~2.5 – 4%)	4.5 – 6%	4 - 6%	Dependent on project security
Administrator	Minnesota Department of Commerce Peter Berger 651-539-1850	Minnesota Department of Commerce Alex Cecchini 651-539-1707	St. Paul Port Authority Peter Klein 651-204-6211	St. Paul Port Authority Peter Klein 651-204-6211	St. Paul Port Authority Peter Klein 651-204-6211	Minnesota Department of Commerce Eric Rehm 651-539-1853

Guaranteed Energy Savings Program (GESP): Administered by the Minnesota Department of Commerce (Commerce), GESP is a procurement and financing mechanism that assists state agencies, local units of government, school districts and institutions of higher education with the development, implementation and ongoing measurement & verification of energy efficiency and/or renewable energy projects. Participants gain access to technical assistance from Commerce, pre-qualified Energy Services Companies, Commerce's Master Contracts, selection and procurement documents, and GESP staff oversight for each phase of the project that can last up to 25 years. The intent of the program is to utilize private capital to implement energy efficiency and/or renewable energy projects on a self-funded basis, utilizing energy and operational cost savings to pay for the improvements, creating jobs in the process through investment in public facilities.

Local Energy Efficiency Program (LEEP): Administered by Commerce, LEEP helps local units of government and school districts identify, study, implement, and finance energy efficiency and recommissioning projects. LEEP makes it easy to identify site-specific goals, find high-quality firms to perform an investment grade audit, and gain access to low-interest lease-purchase financing. Participants gain access to Commerce's technical assistance through each stage of the process, ensuring a comprehensive and cost-effective project.

Energy Saving Partnership (ESP): Administered by the St. Paul Port Authority (SPPA), with a grant from Commerce, ESP is a municipal leasing program with U.S. Bank, which can offer competitive tax-exempt interest rates to all participants on projects both large and small.

Trillion Btu Program: Administered by the SPPA, this program offers loans up to \$1 million to commercial or industrial businesses and 501 (c)(3) organizations seeking to invest in energy efficiency or renewable energy improvements in existing properties.

Commercial - Property Assessed Clean Energy Program (PACE): Administered by the SPPA, this statewide PACE program offers agricultural, commercial or industrial businesses and eligible nonprofit organizations the opportunity to finance energy efficiency or renewable energy systems affixed to an eligible property through a special assessment placed onto the property's tax statement.

Rev It Up Program: Administered by Commerce, annually solicits request for proposals from local units of government seeking low-cost, long-term capital to finance community energy efficiency and renewable energy system projects that are financed via energy savings or projected revenues created by the systems.

Public Energy Audit and Renewable Energy Feasibility Loan Program: Administered by Commerce, this program offers loans to local units of government or K-12 schools seeking to initiate energy audits or renewable energy feasibility studies through its LEEP or GESP.

6. The CHP potential noted in the study seems very high. Can you direct us to the source and assumptions used to calculate this potential?
- **Commerce Response:** Please see the [“Assessment of the Technical and Economic Potential for CHP in Minnesota”](#) report for a full description of the sources and assumptions used to calculate CHP potential. The ICF CHP Database was used to provide background information on the amount of CHP installed in the state. This database remains the most comprehensive and highly utilized database on CHP installations that is currently available. The data on potential CHP candidate sites came from a variety of different sources including the Dun & Bradstreet Hoovers database, the Manufacturers News database, specific industry association databases, as well as the state boiler database, as outlined in the report.
7. How are these recommendations being used to inform Minnesota’s State Implementation Plan for the [Clean Power Plan](#)? Will that be a continuation of these efforts or a separate process?
- **Commerce Response:** While it remains to be determined exactly how CHP could fit within the state’s implementation of the Clean Power Plan, it is clear that CHP can play an important role in supporting Minnesota’s existing policy goals by increasing the average efficiency of Minnesota’s electric and thermal generation systems, reducing aggregate greenhouse gas emissions, and improving the energy security and resilience of local energy systems. The findings from the CHP stakeholder engagement process provide a strong foundation to help inform the larger discussions around implementation of the Clean Power Plan.
8. What is the expected timeline for the [\[Technical Reference Manual\]](#) work related to CHP in light of CIP triennial filing submittals in June 2016?
- **Commerce Response:** Commerce expects to begin the process of establishing a CHP Energy Savings Attribution Model and Project Evaluation Criteria in 2016. Commerce has begun to research and compile existing information about existing CHP energy savings attribution models and project evaluation criteria from other states. This will be distributed to stakeholders early in the process and help inform discussions around developing a Minnesota-specific approach. For more details about this effort, please see “Action Item I: Establish CHP Energy Savings Attribution Model and Project Evaluation Criteria” in the [Final CHP Action Plan](#). Commerce will continue to provide updates about next steps established in the Final Action Plan through the [Department’s CHP Stakeholder Engagement Webpage](#).