



***DOE Packaged CHP Accelerator
Customer Engagement Partner Webinar***

December 4, 2019

Agenda

- CHP Policies and State Incentive Programs
 - Brandon Bowser, Maryland Energy Administration
- eCatalog Status and CHP Supplier Partner Meeting
 - Rich Sweetser
- Packaged CHP Accelerator Update
 - DOE Outreach Plan for the eCatalog
Bruce Hedman
 - Customer Engagement Roadmap Update
Nick Posawatz

This Webinar Is Being Recorded

MEA CHP Incentive Programs

December 4, 2019

U.S. DOE CHP Accelerator Webinar

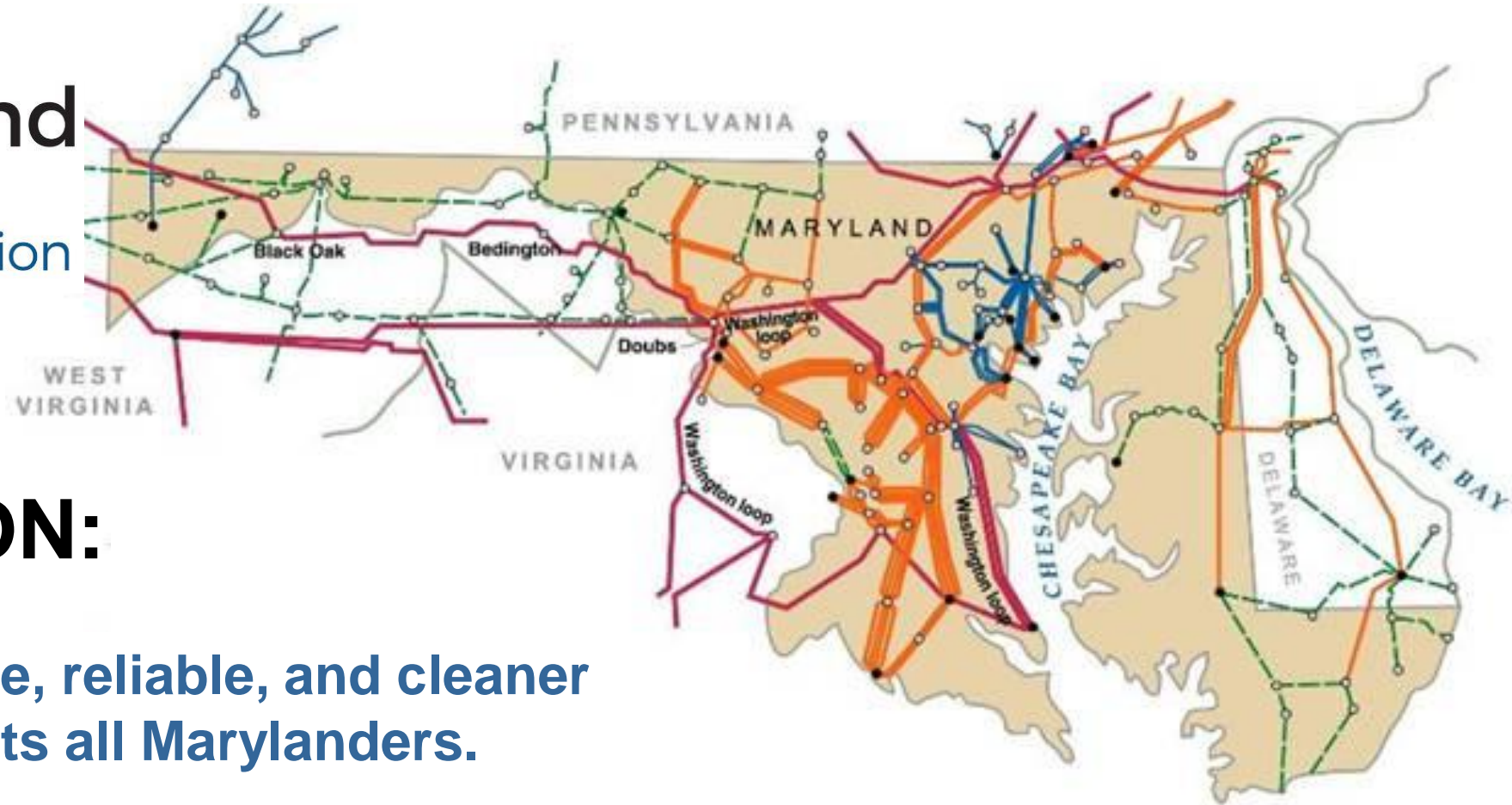
Combined Heat & Power Policies & Incentives



Maryland
Energy
Administration



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OUR MISSION:

Promote affordable, reliable, and cleaner energy that benefits all Marylanders.

RENEWABLE ENERGY :: POLICY, PLANNING & ANALYSIS :: ENERGY EFFICIENCY

The Crossroads of Economics & Energy

MEA PROGRAMS

Combined Heat & Power
Commercial, Industrial & Ag. Energy Efficiency
Data Center Energy Efficiency
Maryland Smart Energy Communities
Jane E. Lawton Conservation Loans
LED Streetlight Conversions

BUSINESS & ECONOMICS

Revenue growth & protection
Innovation, competitive advantage
Indoor comfort, convenience
Skills and job creation
Risk containment:

- weather & climate
- regulatory compliance
- market volatility
- safety

Clean and Renewable Energy Standard (CARES) Initiative

Governor Larry Hogan's plan to get Maryland to 100% clean electricity by 2040, comprised of five (5) goals:

1

- Increase the strategic use of zero- and low-carbon clean and renewable energy sources.

2

- Recognize the clean and safe aspects of nuclear energy.

3

- Support hydropower, coupled directly with maintaining environmental stewardship.

4

- Advance emerging technology for carbon capture and storage.

5

- ***Utilize the role of energy-efficient combined heat and power.***

Combined Heat & Power Grant Program (CHP)

MEA's CHP Value Proposition

- Reduce grid dependency
- Increase resiliency
- Offset downtime risk
- Improve sustainability
- Increase energy affordability
- Meet sustainability goals



Combined Heat & Power Grant Program

- CHP Program began in FY15
- Goal is to increase the presence of CHP DG assets in the state
- Open to all commercial, industrial, institutional, agricultural, and critical infrastructure facilities (So far, 10 major industry types have been funded)
- 40 Grants have been awarded since FY15
- Over \$12.4 Million Committed

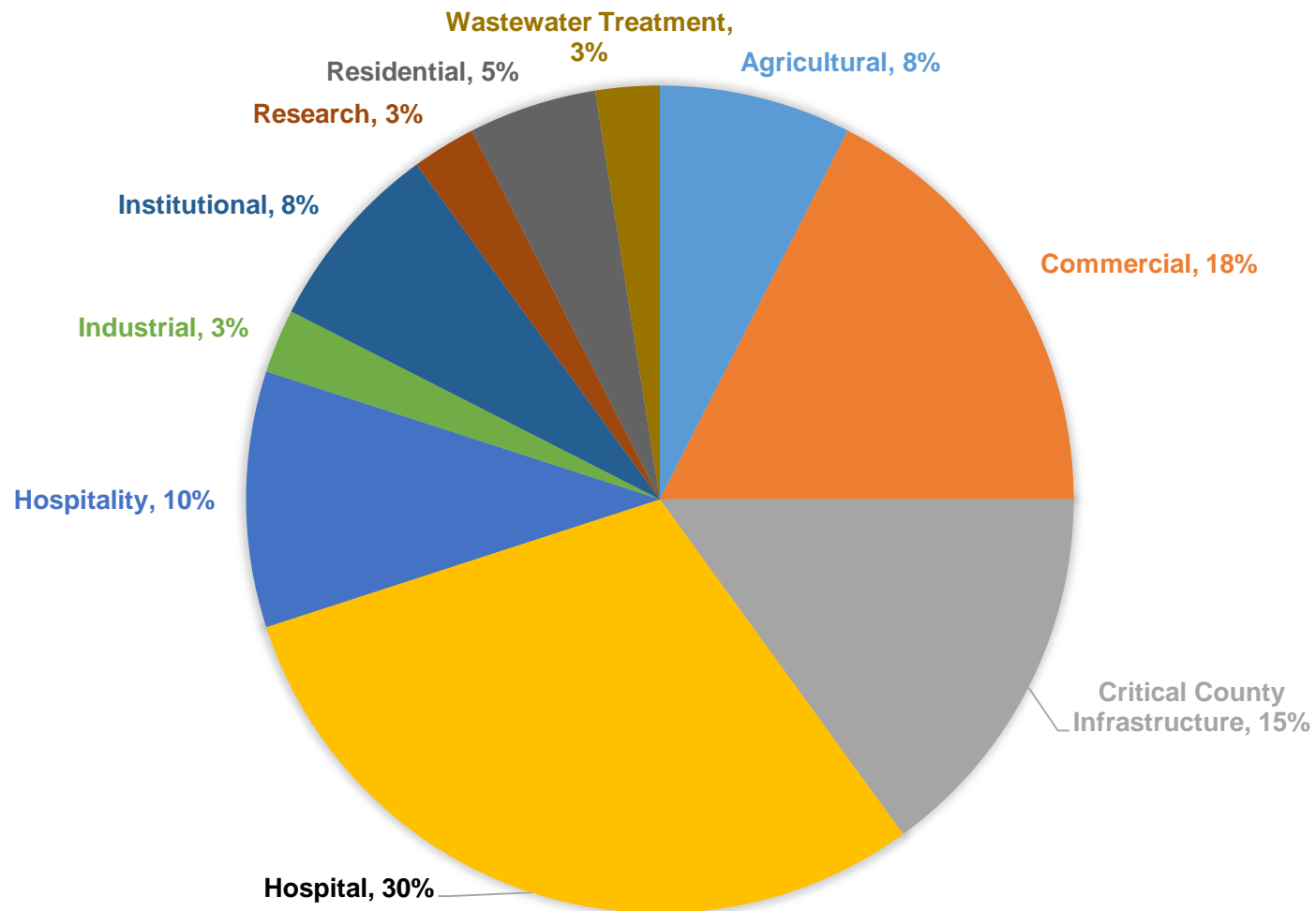


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Combined Heat & Power Grant Program

MEA CHP GRANTEES BY INDUSTRY TYPE, FY15 - FY19



Combined Heat & Power Grant Program

- FY20 Program launched on August 7, 2019
- Goals of the Program are to:
 - Increase presence of CHP within the State;
 - Improve State energy efficiency metrics;
 - Ensure incented projects can operate during grid failures; and
 - Ensure incented projects are cost-effective
- First-come, first served program (best suited for this tech due to lead times, need for early securitization of capital)
- Applications accepted through **February 12, 2020** (or until funding is expended, whichever comes first)



Combined Heat & Power Grant Program

- MEA considers all viable CHP types
 - Reciprocating engines
 - Gas turbines
 - Microturbines
 - Biogas/biofuel generators
 - Bottom-cycling steam generators
 - Fuel cells
 - Innovative/custom designs, such as woody biomass CHP, etc.
- Efficiency Requirements
 - 60% Higher Heating Value (HHV)
 - 50% HHV for fuel cells



Combined Heat & Power Grant Program

- **\$4.2 Million** available in FY20
 - \$3.5 Million reserved for PEPCO and Delmarva Power & Light (DPL) service territories
 - Remainder open to all service territories
 - Condition imposed by funds sourced from PHI-Exelon Merger
- Awards made on a \$ / kW of nameplate capacity basis
 - \$575/kW - \$425/kW
 - Awards decrease with higher capacity due to economies of scale
 - **Max award \$500,000**
- Funds paid out in two (2) phases – at groundbreaking and at commissioning



Combined Heat & Power Grant Program

- All information regarding the MEA CHP Grant Program is available on the [MEA CHP webpage](#).
- Eligibility requirements can be found in the [Notice of Availability](#) (also available on the CHP webpage).
- Applicants are also strongly encouraged to review the [Frequently Asked Questions](#) (“FAQ”) document (also available on the CHP webpage) prior to application.
- Once all requirements are understood and an Applicant is ready to apply, they must complete the [Application Form](#) and [Supplemental Workbook](#) (available under the “How to Apply” section of the CHP webpage) and submit both documents plus all required attachments via the [MEA CHP Grant Program Application Portal](#).








Combined Heat & Power Grant Program

Application Process:

<https://energy.maryland.gov/business/Pages/MEACHP.aspx>

Program Information Documents

-  FY20 CHP Application
-  FY20 CHP Supplemental Workbook
-  Frequently Asked Questions
-  Notice of Availability (NOTE: Updated October 8, 2019)

**Maryland Energy Administration**

Application
Maryland Energy Administration
Combined Heat and Power ("CHP") Grant Program

Application Deadline: 11:59 p.m. EST, February 12, 2020

Instructions: Please read the application thoroughly and complete all sections. Since accurate information is important in reviewing your application, please submit with required supplemental documents to explain your project. The Maryland Energy Administration (MEA) strongly recommends that you read the **Frequently Asked Questions** before completing this application. **Submit this application online at <https://energy.maryland.gov/business/Pages/MEACHP.aspx>.**

APPLICATION CHECKLIST


1 Before starting the application, please verify you have the following documents ready as they will be required to be uploaded to submit the application.
NOTE: Failure to submit these required documents may result in your application being rejected.

Step 1: Verify your project meets the following requirements:

- ☐ This CHP System will be located within the State of Maryland
- ☐ The CHP system ground breaking will take place and materials will be on site by July 1, 2021.
- ☐ The CHP system will be in operation no later than July 1, 2022.
- ☐ The CHP system will meet a minimum system efficiency of 60% (Higher Heating Value) or an eligible non-combustion fuel cell system will meet a minimum system efficiency of 50% based on higher heating value of the fuel.
- ☐ The CHP system will be used at a Commercial, Industrial, or Institutional facility or a Critical Infrastructure facility (e.g., healthcare, wastewater treatment, or essential State or Local government facility)

Step 2: Verify that you have the following documents ready to upload:

- ☐ **Supplemental Workbook** NOTE: Applications that fail to submit a completed supplemental workbook will be considered incomplete.
- ☐ **CHP Feasibility Study** NOTE: Applications that fail to submit a feasibility study will be rejected.
- ☐ **Authorized Signature** provide an authorized signature on this document (found below).
- ☐ **Specification Sheets** for all proposed equipment
- ☐ Most Recent (12) consecutive months of **electric bills**
- ☐ Most Recent (12) consecutive months of **natural gas bills**
- ☐ Copy of the initial utility program incentive application*
- ☐ Utility Incentive program pre-approval letter (if available)*
- ☐ Utility CHP program supplemental documents*
- ☐ If the project is not participating in a utility incentive program a copy of 5-year all-inclusive warranty or service contract is required.

**Maryland Energy Administration**

FY20 Combined Heat and Power ("CHP") Program
Supplemental Application Worksheet
ACCEPTING APPLICATIONS UNTIL 11:59 PM, WEDNESDAY, FEBRUARY 12, 2020 OR UNTIL PROGRAM FUNDING IS EXPENDED

Instructions: Please thoroughly read and complete all sections in all tabs of this workbook. This supplemental worksheet is a **required attachment** to be submitted with your completed application form and all other required documents. Failure to complete and submit this workbook will render your application incomplete. Incomplete applications will be rejected if missing information is not submitted within 30 calendar days of notification by the Maryland Energy Administration ("MEA"). If you have any questions or concerns regarding the completion of this workbook, please contact CHP Program Manager Brandon Bousier at Brandon.Bousier@maryland.gov.

SECTION 1: PROJECT SITE INFORMATION

Applicant Organization (Facility Owner)	Type of Organization	Project Site Name		
	[Select]			
Project Site Address	City	State	Zip Code	County
		MD		[Select]
Does this project involve more than 1 building (i.e. campus)?	If Yes, how many buildings?	Number of CHP Systems	Is the project site located in a historic district?	
[Select]	[Select]	[Select]	[Select]	

1 Properties located in historic districts as designated by the Maryland Inventory of Historic Properties (MIHP) and/or the National Register of Historic Places (NRHP) must undergo a historical preservation review to determine if the installation of the CHP system(s) creates an adverse impact to historical significance of the property. Should an adverse impact be determined, MEA will be unable to issue grant funds to the project in accordance with Maryland State law. If you are unsure if your property is located in a historic district, MEA recommends using the Maryland Historical Trust's MHDUSA map locator tool, available at https://mht.maryland.gov/research_mhdusa.html.

SECTION 2: UTILITY INFORMATION

Electric Utility	If Other, please specify the electric utility below:
[Select]	
Electric Utility Account Number(s) (If more than one, separate with a semicolon ";")	
[Select]	
Current Site Fuel Type	What other type of fuel is used for the facility thermal demands?
[Select]	
Current Site Fuel Provider	If Other, please specify the natural gas/other fuel utility company below:
[Select]	
Natural Gas/Other Fuel Utility Account Number(s) (If more than one, separate with a semicolon ";")	
[Select]	
Proposed Fuel for CHP System	If No, what type of fuel is used for the facility thermal demands (e.g. fuel oil, etc.)?
[Select]	
Proposed CHP System Fuel Supplier	If Other, please specify the natural gas/other fuel utility company below:
[Select]	

Basic Information | Utility Data | CHP System Performance Data | CHP System Financial Data

Combined Heat & Power Grant Program

- Projects are reviewed on a first-come, first served basis and undergo three (3) rounds of review.
 1. Eligibility Review (Program Manager)
 2. Technical Review (DOE CHP Mid-Atlantic TAP)
 3. MEA-ICF CHP Review Team
- Upon Team approval, MEA recommends the project be funded to the Director.
- Upon Director approval, MEA enters into a Grant Agreement.



Combined Heat & Power Grant Program

Step 1: Eligibility Review

- MEA Program Manager (“PM”) screens the application for the following:
 - Completed Application Form
 - CHP Feasibility Study
 - Supplemental Workbook (4-sheet Excel workbook summarizing utility, technical, and financial data from the Feasibility Study/technical documents)
 - EmPOWER Utility Incentive Application (where applicable)
 - 12 consecutive months of utility bills (electric and, where applicable, natural gas/fuel)
 - Certificate of Status from the Maryland State Department of Assessments and Taxation (“SDAT”) verifying that the Applicant organization is in Good Standing
- The PM reviews these documents for completeness, accuracy, and general soundness.



Combined Heat & Power Grant Program

Step 2: Technical Review

- Upon passing the Eligibility Review, the MEA PM submits the application package to the U.S. DOE CHP Mid-Atlantic TAP for vetting of technical feasibility.
 - Mid-Atlantic TAP performs a technical and financial review of the data.
 - An analysis is supplied via a PDF report to MEA detailing the findings.
 - This analysis names any points of clarification or additional information needed from the Applicant, and MEA subsequently reaches out to obtain it.
- After the MEA PM reviews the technical findings and the project passes this step, it is sent to the MEA-ICF Review Team for final approval.



Combined Heat & Power Grant Program

Step 3: MEA-ICF CHP Review Team – Final Review

- The MEA PM submits the application package and Technical Review findings to a team of MEA staff members (Other PMs and Grants Administrators) and ICF engineers for final review of the material.
- This team ensures that all eligibility requirements have been met and that the technical data and review appear accurate.
- Each team member submits their review and yes/no vote on funding.
- If any no votes are received, the MEA PM discusses the reasoning and reaches out to the Applicant for clarifying information if necessary. Team members are permitted to update their votes in the face of additional information.



Combined Heat & Power Grant Program

Award Recommendation

- Upon final approval by the MEA-ICF CHP Review Team, the MEA CHP PM submits a summary of the Applicant's project and funding request amount to the MEA Director for final approval.
- Once the Director gives approval, MEA notifies the Applicant and enters into a Grant Agreement.
- Upon execution of the Grant Agreement, the Grantee is free to begin ordering equipment and installing.



Combined Heat & Power Grant Program

Grant Payout and Measurement & Verification

- MEA pays out the funds in two phases:
 - 30% of the Award upon project groundbreaking (construction begins, materials arrive onsite)
 - 70% of the Award upon project commissioning (installation complete, system startup, approval to operate)
- Grantees agree to make performance data on their systems available to MEA upon request for three (3) years after commissioning.
- MEA will perform M&V of performance data on commissioned systems after the first year of operation.
- Presently no financial penalties for failure to meet anticipated targets. M&V data is used for incentive Program optimization.



Combined Heat & Power Grant Program

- Projects currently are allotted two (2) years to commission from Grant Agreement execution.
- **Year 1: Design, procurement, contract execution, and groundbreaking.**
- **Year 2: Construction, commissioning, and production.**
- Extensions are permitted when projects encounter unexpected challenges or circumstances outside of Grantees' control.
- MEA requires commissioning verification and evidence that system meets efficiency and technical specifications described in Scope of Work before final payout occurs.



Combined Heat & Power Grant Program

**Grant is stackable
with other incentives!**

MEA understands that one of the biggest CHP hurdles to overcome is sourcing capital. We ensure our incentives are designed to work with other funding streams.



- Utility Incentive

- MEA Grant

- MEA Lawton Loan

- C-PACE

Jane E. Lawton Conservation Loan Program

- Low-cost (**2.0%**) loan from MEA
- Term defined by payback period, maximum 13 years
 - Project paybacks > 13 years allowed, but term cannot exceed 13 years
- Loans range from approximately \$50,000 - \$500,000
- Annual payment in August of each year
- Can be used for CHP, energy efficiency projects

Combined Heat & Power Challenges

- More often than not, MEA experiences the following challenges:
 - CHP Project Lead Times changing (requires extensions to Grant Agreements)
 - Grantees securing capital
 - Projects changing hands between developers
- Vision for Solutions
 - Push more CHP candidates to the U.S. DOE eCatalog for packaged units
 - Present candidates with several different financing avenues outside of CHP Grant
 - E.g. Lawton Loans, EmPOWER Utility Incentives, C-PACE, etc.
 - Increase project timeframes in Grant Agreements (2 years to 3, 4 years, etc.)

Increased Natural Gas Infrastructure

- MEA sees tremendous value in increased natural gas infrastructure
- Economic development opportunities, increased energy security
- Allows CHP candidates to take advantage of the technology where natural gas is not currently available
- E.g. Maryland's Eastern Shore (particularly Somerset, surrounding counties)

Increased Natural Gas Infrastructure

- MEA offering the **Maryland Energy Infrastructure Program (“MEIP”)** beginning FY20
- \$3.7 Million available to Local Distribution Companies (“LDCs”) and Anchor Customers for aid in:
 - Natural gas distribution infrastructure expansion
 - Anchor facility natural gas conversion
 - Cost of Aid in Construction (“CAIC”) Dispensation Funds
- Program accepting applications through **December 11, 2019**

EVERYTHING is on energy.maryland.gov!

- CHP Grant Program: <https://energy.maryland.gov/Business/pages/meachp.aspx>
- Lawton Loan Program: <https://energy.maryland.gov/Govt/pages/janeelawton.aspx>
- Maryland Energy Infrastructure Program:
<https://energy.maryland.gov/govt/Pages/MEIP.aspx>
- EmPOWER MD Utilities: <https://energy.maryland.gov/Pages/Facts/empower.aspx>



Questions?

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Energy.Maryland.gov



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eCatalog Update

Packaged CHP eCatalog Update

- Current Status
 - 32 Recognized Packagers
 - 29 Recognized Solution Providers
 - 147 Recognized Product Offerings
 - 8 Customer Engagement Partners Enrolled
(7 with Supplier/Package program recognition)
- Near-term Focus
 - Work with current eCatalog suppliers to fill out product lines
 - Recruit key national/regional suppliers (Cat, MTU, Jenbacher, Siemens)
 - Complete enrollment of Customer Engagement Partners
 - New enhancements to eCatalog

NEW: Additional Supplier Categories in Search

FOCUS YOUR RESULTS




[reset](#) | [save search](#) | [favorites](#)

PRIMARY SITE LOCATION

10005

Selected: **New York, NY**

SUPPLIER PRIORITY

- ☐ Packagers offering Recognized systems 
- ☐ Solution Providers offering, installing, commissioning and maintaining Recognized systems
- ☐ Solution Providers offering Assurance Plans 
- ☐ Solution Providers offering Energy Services 

CUSTOMER ENGAGEMENT PARTNER

- ☐ Prioritize program-eligible packaged systems

DISPLAYING: 147 Packages ordered by Relevance

AV

 Available

SP

 Solution Provider

AP


 Assurance Plan


CE

 Local Support

OD

 Outdoor




View Details

C800S-ICHP HPNG DM MAX EFFICIENCY


<input type="radio"/> Power Output:	800 kW
<input type="radio"/> Thermal Output:	Hot Water Only
<input type="radio"/> Fuel:	Natural Gas
<input type="radio"/> Prime Mover:	4x Microturbine
<input type="radio"/> Grid Connection:	Black Start, Auto

AV


SP


AP


CE



52

FULL MATCH (100%) 




The Right C
Packaging Solution for

M285 OI


<input type="radio"/> Power Output:	
<input type="radio"/> Thermal Output:	
<input type="radio"/> Fuel:	
<input type="radio"/> Prime Mover:	1x R
<input type="radio"/> Grid Connection:	

AV

SP

AP

FULL MATCH (100%)

 U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy

NEW: Aftertreatment

Stoichiometric engine with 3-way catalyst

Lean-burn engine with no aftertreatment

Lean-burn engine with Oxidation Catalyst

Lean-burn engine with SCR

Lean-burn engine with Oxidation Catalyst and SCR

Microturbine with no aftertreatment

Microturbine with aftertreatment

Combustion turbine with no aftertreatment

NEW: ORC as Thermal Output

65	Thermal Energy Output - Organic Rankine Cycle (ORC)	Yes			
132	Organic Rankine Cycle				
133	<i>Multiple Organic Rankine Cycle manufacturers/model numbers can be specified under a single Packaged CHP system model number, on an "or equal" basis, provided</i>				
134	ORC Manufacturer				
135	Model				
136	Prime Mover Thermal Energy Supply Type				
137	<i>Performance - Data required for three ambient temperatures: 0°F, 59°F, and 95°F) and four Prime Mover Gross Power Outputs (100%, 75%, 50%, and an Optional</i>				
138	Percent Gross Generator Output	%	100		
139	Ambient Temperature		95F	59F	0F
140	Prime Mover Thermal Supply Energy Available (e.g. Thermal Energy in Exhaust Stream at Exhaust Temperature)	MMBtu/hr			
141	Thermal Supply Energy used by ORC	MMBtu/hr			
142	Thermal Energy Supply Temperature before ORC	°F			
143	Thermal Energy Temperature after ORC	°F			
144	ORC Gross Power	kW/hr			
145	ORC Parasitic Power	kW/hr			
146	ORC Net Power output	kW/hr			

NEW: OEM Packager Partial System Application

OEM Packagers will soon be able to:

- Create a partial Packaged CHP System for review and recognition, such as a prime mover generator package
- Approved channel partners are able to copy the partial CHP Packaged CHP System and complete a full packaged system application with added components and upload their specific system in the eCatalog

CHP Supplier Partner Meeting

- November 18 – PowerGen International 2019
 - Feedback form sent to all eCatalog and Accelerator CHP Suppliers
 - 10 CHP Suppliers participated in the meeting in person or remotely
- Gather Initial Feedback on the eCatalog Version 1.0
 - User experience
 - Packager/Solution Provider Enrollment experience
 - Packaged System Application experience
 - Improvements and new concepts for Version 2.0
- Highlight DOE Outreach Programs
 - Packaged CHP Accelerator and role of Engagement Partners
 - DOE Headquarters Outreach
 - CHP Technical Assistance Partnerships (CHP TAPs)

CHP Supplier Feedback

- Search, sort and data presentation
 - Concern that search results include poor match options (<50%)
 - Can additional information (e.g., electric efficiency) be added to equipment cards
 - Consider adding a “Compare” feature – display limited number of performance parameters for a selected group of packages for quick comparison
 - Add net CO₂ emissions (lbs/MWh) in detailed data tables (calculated value based on displaced thermal output emissions)
- Marketing Support
 - Link to DOE CHP Installation Database and CHP Project Profiles
 - What information can be gathered and shared from “user” statistics and data
 - What are DOE and Customer Engagement Partners doing to promote the eCatalog

Accelerator Update

eCatalog Outreach

DOE Public Introduction of eCatalog

- Sent to 62,000 DOE EERE Stakeholders in conjunction with PowerGen 2019
- Supporting materials sent to Suppliers, Engagement Partners and CHP TAPs to multiply DOE's outreach
 - Direct emails
 - Blogs
 - Press releases
 - Corporate communication



New eCatalog Helps Remove Installation Barriers, Lower Project Costs of Packaged CHP Systems

The [Packaged Combined Heat and Power \(CHP\) Systems eCatalog](#), developed by the U.S. Department of Energy's (DOE) [Advanced Manufacturing Office \(AMO\)](#), within the [Office of Energy Efficiency and Renewable Energy](#), was introduced today at [POWERGEN International](#), the world's largest power generation event. The eCatalog is an open-source, web-based platform for CHP users that want to learn about packaged CHP systems. This online tool assists in removing installation barriers, lowering project costs and development times, and reducing perceived risks of installing CHP.

CHP systems are highly efficient forms of distributed electricity generation that can supplement, or even replace (e.g. during blackouts), power from the grid. Most CHP installations involve custom engineering and design, whereas packaged systems in the eCatalog are standardized or pre-engineered and can be assembled off-site. This reduces the time and expense of developing a CHP installation.

The eCatalog includes packaged CHP systems with select features designed to reduce economic and performance risk for both the end-user and supplier. CHP users can review standardized electrical and thermal performance data for packaged CHP systems offered by recognized CHP system providers.

The eCatalog features include:

- **CHP packagers** provide pre-engineered and tested packaged CHP systems that meet or exceed DOE performance requirements.
- **CHP solution providers** responsibly install, commission, maintain, and service recognized packaged CHP systems. Solution providers also serve as a single point of project responsibility.
- **CHP customer engagement partners** (utilities, states, municipalities, and federal agencies) support the deployment of packaged CHP by linking their CHP outreach programs, support resources, and applicable incentive programs to the eCatalog.

DOE has conducted a comprehensive review of the engineering and performance test data submitted by the recognized packagers. The DOE review process also assures eCatalog users that recognized packagers and solution providers have proven engineering, design, assembly, installation, and service capabilities to provide packaged CHP systems that can be easily installed and commissioned, and that deliver the specified performance.

The CHP eCatalog is the product of a voluntary public-private partnership designed to validate packaged CHP technologies for growing commercial, institutional, multifamily, government, and light manufacturing markets. The tool currently includes packaged CHP systems ranging from 24 kilowatts to 7.5 megawatts offered by a core group of recognized packagers and solutions providers throughout the nation.

The CHP eCatalog will continually be updated with additional packages, packagers, solution providers, and customer engagement partners. Click [here](#) to access the CHP eCatalog. Visit the DOE [Packaged CHP Accelerator website](#) to learn more about packaged CHP and ongoing initiatives.

DOE Headquarters Outreach

- DOE landing page for eCatalog (brief description and hyperlink)
- Update/expand promotional materials
 - eCatalog fact sheet
 - eCatalog PowerPoint resources
 - Assist TAPs and Engagement Partners
- Considering creation of eCatalog logo for Supplier Partner use
- Promote eCatalog to government agencies
 - FEMP
 - GSA
 - DoD
 - HUD

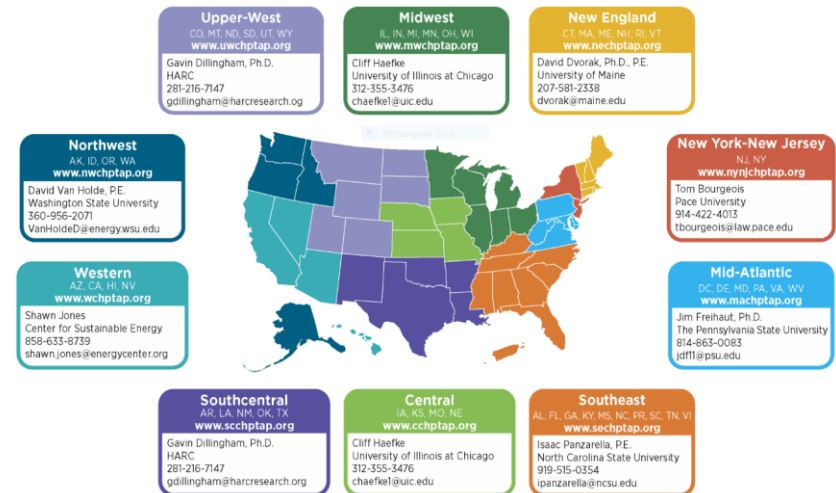
DOE Headquarters Outreach

- Presentations to promote the eCatalog
 - ✓ Federal Utility Partner Working Group (FUPWG)
 - ✓ POWERGEN 2019
 - ✓ ASHRAE
 - ✓ Electrical Generating Systems Association (EGSA)
 - Regional Energy Efficiency Alliances
 - ACEE Efficiency as a Resource
 - User Groups - HotelPoint 2020, International Facility Management Association (IFMA)
- Presentations at Customer Engagement Partner meetings
 - ✓ LIPA/PSEG LI Customer Expo
 - ✓ AEP Ohio CHP workshop
 - Others?
- Webinars to demonstrate the eCatalog
 - ✓ Energy Solutions Center (ESC)
 - AGA
 - EEI

DOE Technical Assistance Partnerships (TAPs)

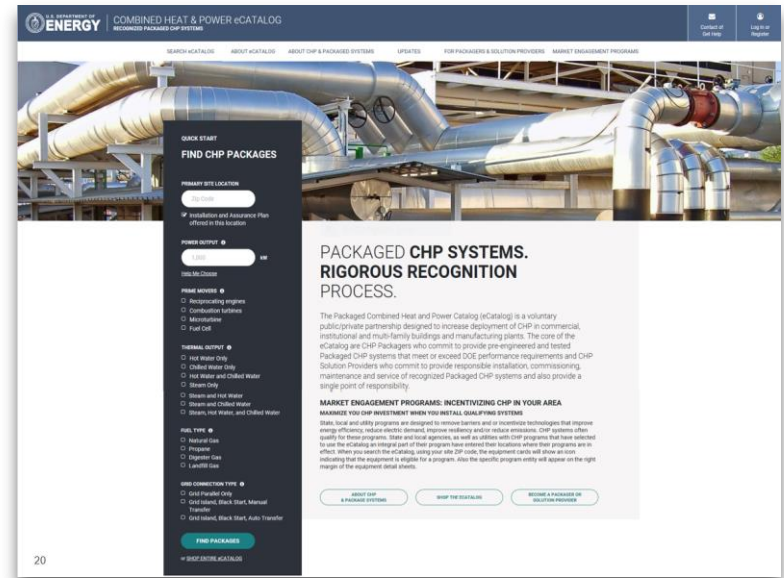
- eCatalog will be the principle tool in engaging end-users to help them understand CHP offerings in their region
- Engage with Supplier Partners to ensure that they have appropriate CHP product lines in the catalog
- Create strategic partnerships with Customer Engagement Partners:
 - Provide eCatalog outreach and education support in conjunction with Customer Engagement Partners
 - Provide technical assistance to end-users, consulting engineers and energy service companies in conjunction with Customer Engagement Partners
 - Work with Customer Engagement Partners to integrate eCatalog into CHP deployment/incentive programs
 - Support Customer Engagement Partners to validate and verify results

DOE CHP Technical Assistance Partnerships (CHP TAPs)



CHP Supplier Partner Expectations

- Get packages into the eCatalog
- Improve company descriptions and capabilities in the eCatalog
- Complete installation data
- Promote the use of the eCatalog
 - List on website, promotional literature, brochures/catalogs, etc.)
- Engage with the CHP TAPs to create eCatalog promotion events
- Engage with Customer Engagement Partners



20

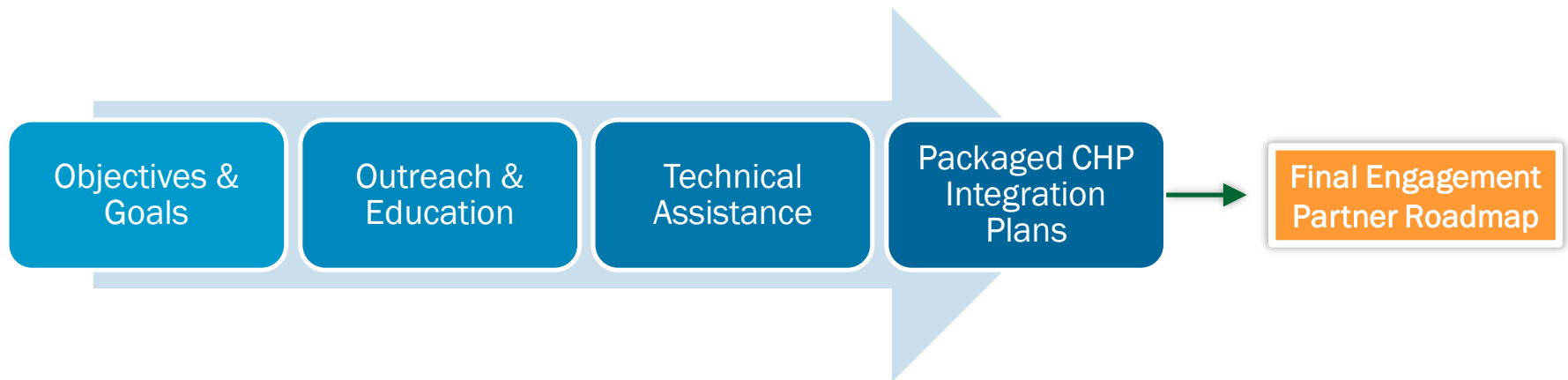
Customer Engagement Partner Expectations

- Promote the eCatalog as part of CHP programs
 - Enroll in the catalog as an Engagement Partner
 - Outreach and education on CHP and eCatalog
 - Facilitate connections between end-users and eCatalog Packagers and Solution Providers
 - Provide technical assistance along project development path
 - Integrate eCatalog into assistance and incentive programs
- Identify additional supplier partners for the eCatalog
- Coordinate with TAPs on outreach and technical assistance efforts
- Work with suppliers in region for validation and verification of results

Partner Roadmaps

Partner Roadmaps

- DOE/ICF continuing to finalize engagement partner roadmaps
 - 6 finalized and completed
 - 6 drafted and have not received a partner response
 - 6 drafted and scheduling calls (emails to come this week)
- *If not able to attend calls/meetings, please provide any updated and/or edits that you would like to see in the final version of your roadmap*



DOE Team

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<https://chp.ecatalog.lbl.gov/>