



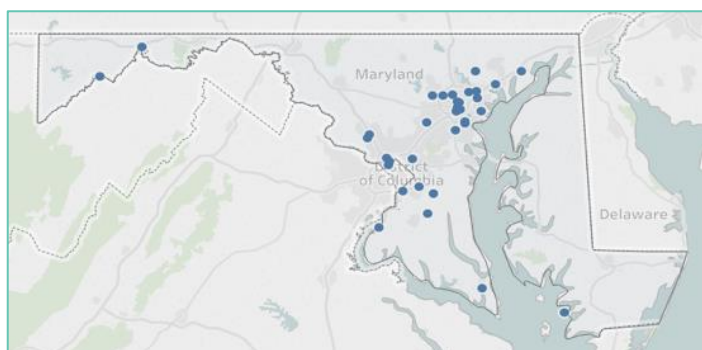
Combined Heat and Power (CHP) Snapshots – Maryland

Mid-Atlantic CHP Technical Assistance Partnership (TAP) Quick Facts

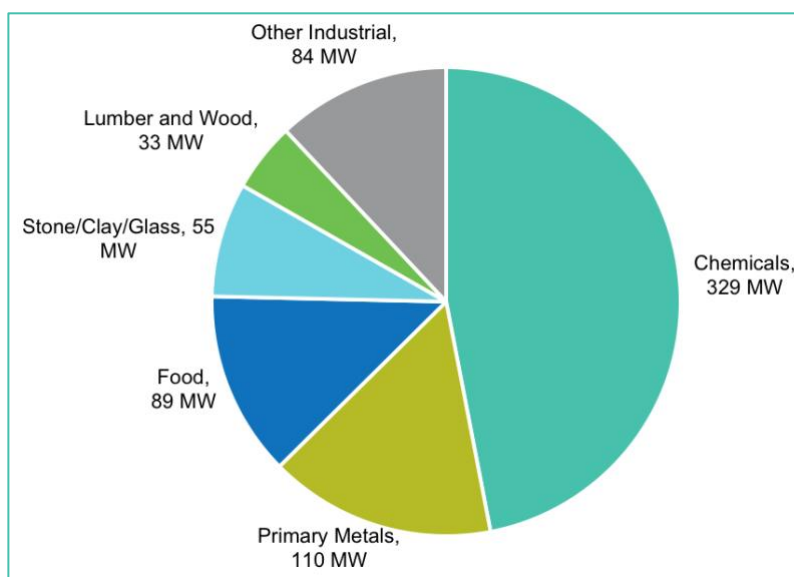
- The Mid-Atlantic CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the Mid-Atlantic region of the U.S.
- The Mid-Atlantic CHP TAP serves the states of Delaware, **Maryland**, Pennsylvania, Virginia, and West Virginia.

State	Number of Current Sites	Total CHP Capacity (MW) Deployment	Number of Potential Sites	Total CHP Technical Potential (MW)	CHP TAP Activities (2014-2017)		
					Technical Assistance	End-User Education	Policymaker Education
Delaware	7	371	832	747	11	1	0
Maryland	37	668	4,920	2,645	104	2	14
Pennsylvania	168	2,938	12,708	7,759	67	13	21
Virginia	50	1,608	7,291	4,308	10	3	6
West Virginia	10	277	1,630	929	5	3	3
Total	272	5,862	27,381	16,388	197	22	44

Maryland CHP Installations



CHP Technical Potential by Industrial Sector





Maryland CHP Project Snapshots

- ◆ **Baltimore Refuse Energy Systems Company (Baltimore, MD)** – Installed in 1985, the 60 MW CHP system at the Baltimore Refuse Energy Systems Co. (BRESKO) waste-to-energy plant utilizes solid waste from the Baltimore County area and converts it into over 500,000 pounds of steam per hour. BRESKO has a contract with Veolia Energy to use the steam to generate both electricity and steam for district heating and cooling of buildings in downtown Baltimore. The system cuts annual energy costs by \$29 million and reduces the volume of incoming waste by nearly 90%.
- ◆ **U.S. Army Aberdeen Proving Grounds (Aberdeen, MD)** – In 2016, the U.S. Army installed a 8.1 MW CHP system to provide the Edgewood Area of its Aberdeen Proving Ground with electricity and steam. The system provides 50% of the electrical needs and 80% of the steam needs for the area. The steam is used to heat and cool a number of important buildings at the military installation, including state-of-the-art laboratories for R&D organizations. On average, this project saves the U.S. Army \$4.4-million in energy-related costs each year.

Testimonials from CHP TAP Beneficiaries in Maryland

“The [Mid-Atlantic CHP TAP] has provided The Maryland Energy Administration and end-users with responsive and accurate end-user technical and economic screenings. The Partnership has also supported end-users with the technical support necessary to move CHP projects into and through the decision and installation process. The Mid-Atlantic CHP Technical Assistance Partnership is always engaged in policy and regulatory development by providing clear and distinct best practices from across the nation and has been an incredibly important resource when working with Maryland state and local policymakers and regulators to educate them on CHP policy best practices.”

*Maryland Energy Administration
Baltimore, MD*

“I would like to thank the Mid-Atlantic [CHP TAP] for their on-going support of the Combined Heat and Power (CHP) project that the Social Security Administration (SSA) is currently performing. [The TAP] has provided excellent service in the review of the SSA’s 50% submission in our Level II EPA study efforts. The feedback from [the TAP] has been supported by their technical stance and support moving through the study phase of the project. They have been very helpful as a third-party reviewer as well.”

*Carl Pasquali, Building Management Officer
Social Security Administration
Woodlawn, MD*

Mid-Atlantic CHP TAP Contact:

Jim Freihaut, Professor of Architectural Engineering, Pennsylvania State University
(814) 863-0083, jdf11@psu.edu

¹ U.S. DOE, December 2016, “Combined Heat and Power Installation Database” (<https://doe.icfwebservices.com/chpdb/>).

² U.S. DOE, March 2016, “Combined Heat and Power (CHP) Technical Potential in the United States” (<https://energy.gov/eere/amo/downloads/new-release-us-doe-analysis-combined-heat-and-power-chp-technical-potential>).