



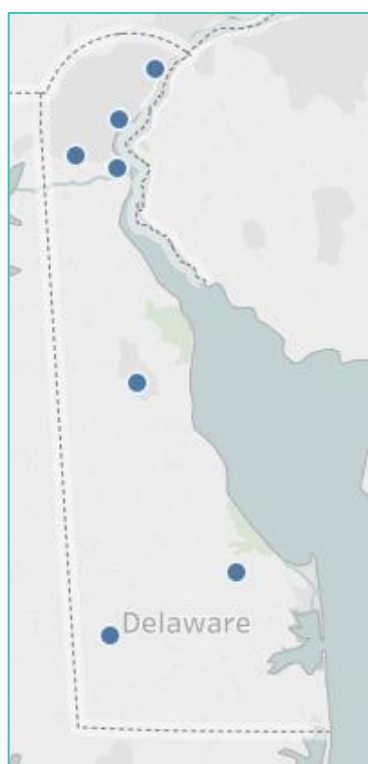
Combined Heat and Power (CHP) Snapshots – Delaware

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

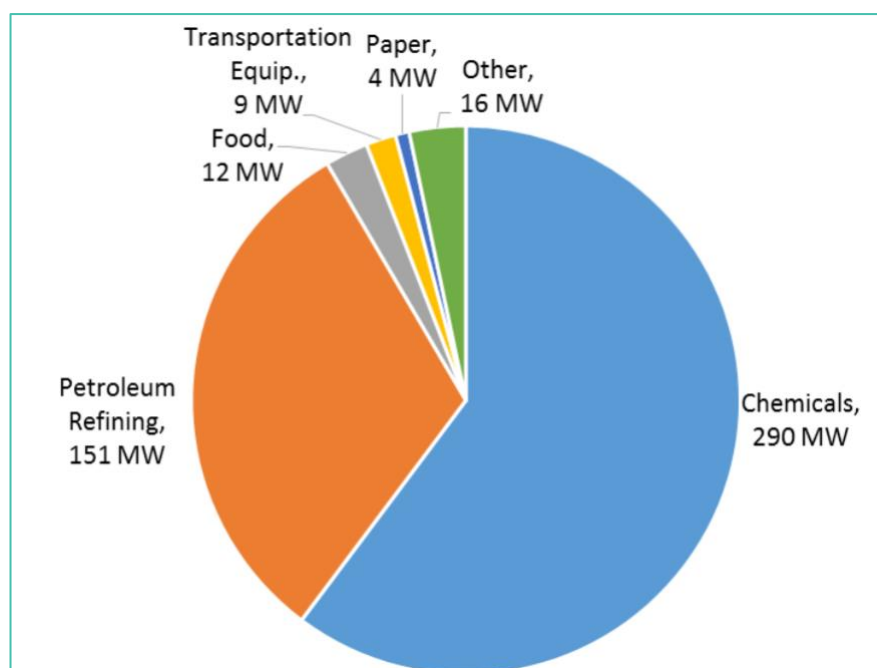
- The Mid-Atlantic CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the Mid-Atlantic region of the U.S.
- The Mid-Atlantic CHP TAP serves the states of **Delaware**, Maryland, Pennsylvania,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

Delaware CHP Installations



CHP Technical Potential by Industrial Sector





Delaware CHP Project Snapshots

- **Hay Road Wastewater Treatment Plant (Wilmington, DE)** – Installed in 2015, the 4 MW CHP system at the Hay Road Wastewater Treatment Plant utilizes anaerobic digester gas produced onsite and also waste methane from the nearby Cherry Island Landfill. The CHP system has reduced energy costs for the facility and improved their operational efficiency with onsite fuel production. The design and installation of the CHP system created more than 100 jobs during construction and 5 full-time positions for ongoing operations and maintenance.
- **Croda Manufacturing (New Castle, DE)** – Croda Manufacturing installed a 2.2 MW CHP system at its Atlas Point chemical manufacturing plant in 2015. The facility uses nearby landfill gas to power its CHP system, which supplies roughly 70% of the plant's electricity needs. Decreased energy use and increased efficiency from CHP resulted in cost savings that helped the company increase its competitiveness and invest approximately \$50 million in site upgrades since 2013.

Testimonials from CHP TAP Beneficiaries in the Mid-Atlantic

"We have found the expertise and professionalism of the [Mid-Atlantic CHP TAP] to be incomparable for the knowledge they have offered and have provided us with basic knowledge and understanding of the complex aspect of CHP processes. I haven't found any other contractor that can offer the experience and talent than this program can offer better than Penn State. It would be a huge deterrent with my projects here in Delaware without the help of your staff. The help we've received is immeasurable. We look forward to continued support for our future projects."

*Delaware Department of Natural Resources and Environmental Control
Dover, DE*

"National Electrical Contractors Association (NECA) has recognized the great potential of combined heat and power energy projects, in particular in the Mid-Atlantic Region. The third party technical screening and feasibility studies [the Mid-Atlantic CHP TAP] team provides in our region have directly contributed to the growing awareness of the value of CHP in energy portfolios. The Penn-Del-Jersey Chapter, NECA has been very active in promoting CHP in our region because of the strong potential for our members and their clients to observe economic and resiliency gains enabled by these projects. [The work of the team] at the CHP TAP Center is highly valued and much appreciated contribution to economic development and energy strategy."

*National Electrical Contractors Association (NECA)
Philadelphia, PA*

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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>).