

Combined Heat and Power (CHP) Snapshots - West Virginia

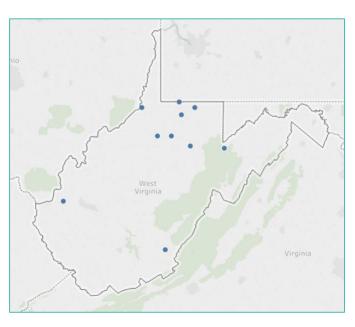
Mid-Atlantic CHP Technical Assistance Partnership (TAP) Quick Facts

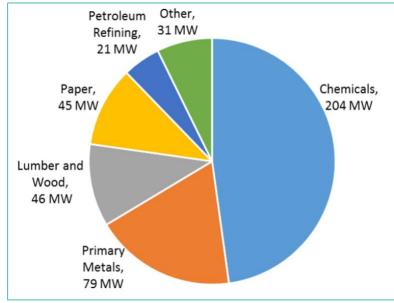
- The Mid-Atlantic CHP TAP works with regional partners to promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies throughout the Mid-Atlantic region of the U.S.
- The Mid-Atlantic CHP TAP serves the states of Delaware, Maryland, Pennsylvania, Virginia,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

| State | Number | Capacity | Number of Potential Sites | Total CHP Technical Potential (MW) | CHP TAP Activities (2014-2017) | | |
|---------------|------------------------|----------|------------------------------------|---|--------------------------------|-----------------------|--------------------------|
| | of Current Sites | | | | 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 |

West Virginia CHP Installations

CHP Technical Potential by Industrial Sector







West Virginia CHP Project Snapshots

- Blackville Gas Compressor Station, (Blacksville, WV) In 2012, Equitrans opened the Blacksville pipeline compressor station near Blacksville, WV. To power this gas gathering, dehydration, and compression station, Equitrans installed a 390 kW microturbine CHP system. This CHP system operates 24/7 and provides 100% of the station's electricity and heating needs, allowing the station to serve its West Virginia and Pennsylvania customers, even in the event of a grid outage.
- H3 LLC, (Milton, WV) H3 assembles mineral rights properties for oil and gas companies in West Virginia. It also leases its own mineral properties throughout the state. In 2016, the company installed an 8 kW micro-CHP system to provide electricity, heating, cooling, and domestic hot water to their headquarters in Milton, WV. The system has reduced energy costs for the facility and provides increased reliability in the event of grid outages.

Testimonials from CHP TAP Beneficiaries in the Mid-Atlantic

"On behalf of PECO, an electrical and natural gas distribution company serving 1.6 million customers in eastern Pennsylvania I want to thank you for the great work your organization has done in support of the advancement of the implementation of combined heat and power (CHP) technology in the region. PECO promotes the greater implementation of CHP through its Act 129 CHP offer currently in effect through May of 2021. Over this period, we have earmarked nearly \$25M to advance acceptance and implementation of CHP and we rely heavily on the Mid-Atlantic CHP Technical Assistance Partnership as a means to help educate our customers on CHP technologies and benefits."

PECO Energy Company Philadelphia, PA

"We have found the expertise and professionalism of the 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. I look forward to continued support for our future projects."

Delaware Department of Natural Resources and Environmental Control Dover, DE

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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).