

1. Resilience Planning

The State of Maryland and the Maryland Energy Administration (MEA) are active in improving energy resilience and sustainability through hardening the state's grid, reducing the cost of power outages, promoting public safety, and protecting critical infrastructure in order to sustain economic activity and maintain essential services. The MEA actively partners with other state agencies to accomplish resilience planning goals. In 2012 MEA, the Maryland Emergency Management Agency (MEMA), and the Maryland Public Service Commission (PSC) collaborated to develop the Maryland [Energy Assurance Plan](#), which aims to improve energy assurance and reliability in the state. A [grid resiliency task force](#) was also convened in 2012 to evaluate the effectiveness and feasibility of undergrounding supply and distribution lines and infrastructure investments to improve grid resiliency. In 2014, MEA released a report making technical, financial, legal and regulatory recommendations to increase microgrid deployment in the state. The MEA's resiliency planning strategy incorporates a range of technologies, including CHP and microgrids, renewables, battery storage and diesel generators.

2. Program or Project Implementation

The MEA has identified a number of important target sectors to prioritize the deployment of CHP for resilience. These include critical infrastructure facilities such as hospitals, waste water treatment plants and community centers. Opportunities for the deployment of renewable generation technologies and microgrids for resiliency planning are also being examined. Moving forward, the MEA will continue to work with local governments to garner support for the deployment of microgrid applications and continue to support deployment of CHP at critical infrastructure facilities through grants and incentive programs.

The MEA administers a [CHP grant program](#) designed to encourage the growth of CHP throughout the state. In fiscal year 2018, the program will offer \$5.5 million to eligible commercial, industrial, institutional facilities (including healthcare, wastewater treatment, and essential state and local government facilities). Individual grants within the program range from \$425/kW to \$575/kW based on the size of the CHP system. The project cap is \$500,000, and the grant also awards \$1 million to projects that utilize biomass or biogas resources as a fuel source.

The primary goal of these CHP deployments is to build resiliency at critical facilities, with the added benefits of reducing a facility's energy consumption and carbon footprint. Reduction in facility loads also leads to reductions in grid congestion, thus ensuring utilities have more resources on hand for customers during high-demand days of extreme heat or cold. Further, CHP in Maryland helps meet the State's goal to reduce greenhouse gas emissions by 40% below the 2006 level by 2030 under the Greenhouse Gas Reduction Act of 2016.

3. Lessons Learned

The MEA has learned that outreach and education are key to growing support for CHP deployment in the state. To advance individual CHP projects, it is critical to find a champion in a target facility who can proactively advocate for the deployment of CHP. It is also necessary to engage actively with engineering firms and utilities to understand the possible hurdles in the deployment process, and the right contractors with knowledge of CHP systems. The MEA is in a unique position because it has the flexibility to redesign energy programs to align with a changing market. This flexibility allows MEA to make adjustments, combine programs, and produce new technology initiatives without disrupting the overall goals of specific programs.

CHP for Resiliency Accelerator Partner Profile

In the future, the MEA plans to focus on promoting packaged CHP systems as a way to streamline potential projects and improve project financing. Micro-CHP systems and renewable CHP are also key focus areas going forward and MEA plans to work with DOE on educational materials that can better inform Maryland customers and potential programs.

4. Additional Information

- ▶ [Maryland Energy Assurance Plan \(EAP\)](#)
- ▶ [Maryland Resilience Through Microgrids Task Force Report](#)
- ▶ [MEA CHP Program](#)