

Maryland's EmPOWER Program: Using Energy Efficiency to Lower Energy Bills

Rising Energy Costs Make Energy Efficiency More Urgent

Between 2022 and 2025, Maryland households saw electricity prices rise **by 26%**, intensifying concerns about energy affordability across the state. These increases stem from a mix of factors, including growing electricity demand and higher prices in regional power markets.

As policymakers look for solutions, Maryland already has a powerful tool in place: EmPOWER.

The state's flagship energy efficiency program, EmPOWER Maryland, was established in 2008 to help households and businesses reduce energy use and lower bills. Lawmakers designed the program to cut peak demand, reduce per-capita electricity consumption, and avoid the need for costly new power plants, easing pressure on ratepayers. Today, EmPOWER stands as a cornerstone of Maryland's energy affordability strategy.

EmPOWER's Impact Over Time — Benefits for Pocketbooks and More

Since the inception of EmPOWER in 2008, the program has saved money for households, lowered system costs, and reduced the need for expensive infrastructure.

Nearly 17 million MWh saved

Enough to power about 95,000 Maryland homes for 15 years

3,231 MW of peak demand avoided

More than half the capacity of Maryland's natural gas power plants

Energy efficiency saves money — and improves health.

\$2.21 in societal benefits for every \$1 invested

Benefits include lower energy bills, reduced pollution, and improved home comfort, health, and safety

\$50–\$86 million in annual health benefits

In 2025 alone, EmPOWER reduced harmful air pollutants (SO₂, NO_x, and particulate matter) by over 500 tons, resulting in health benefits for Marylanders

How EmPOWER Lowers Costs

For Households:

EmPOWER helps thousands of Maryland residents each year lower their energy use through rebates and services, including:

- Replacing inefficient appliances like refrigerators
- Adding insulation and weatherization
- Upgrading to high-efficiency heating and cooling systems, such as heat pumps

These improvements reduce monthly bills while making homes more comfortable.

For the Energy System:

Efficiency helps lower costs for everyone. By reducing overall electricity demand, EmPOWER eases strain on the grid and avoids the need for expensive new power plants. This matters because building and operating power plants is costly, and those costs are ultimately passed on to ratepayers.

In fact, saving energy is often [cheaper than generating it](#):

- Gas combined cycle power plant costs: **\$45–\$108 per MWh**
- EmPOWER efficiency costs (2021–2023): **\$35 per MWh**

In other words, the cheapest unit of energy is the one never used.

Cutting Peak Demand and Avoiding Major Costs

EmPOWER also reduces costs by lowering demand during peak periods, when electricity is most expensive.

Utilities must pay for enough capacity to meet peak demand through PJM's regional capacity market, where prices have recently reached historic highs. When peak demand drops, so do these costs.

- In 2025, according to utility 2025 EmPOWER filings, the program's energy efficiency and electrification programs reduced summer peak demand by **229 MW**.
- According to RMI analysis, this means EmPOWER avoided approximately **\$358 million** in capacity, transmission, and distribution costs, not accounting for additional avoided energy or fuel costs.

If not for EmPOWER, these costs would have otherwise been passed on to Maryland ratepayers.

EmPOWER as a Tool to Unlock More Savings Ahead

Despite its success, significant opportunities remain to deliver further system-wide energy savings and efficiency in Maryland. EmPOWER can help accelerate the adoption of high-impact technologies to upgrade homes and lower energy bills.

Prioritizing upgrades for homes with large efficiency upgrades for homes with electric resistance space and water heating:

Electric resistance is one of the least efficient ways to heat a home. It's a heating technology that converts electric energy directly into heat. Heat pumps, by contrast, move heat rather than generate it, making them two to four [times more efficient](#).

- Switching from electric resistance space heating to heat pump technology can save single-family homes upward of **\$2,000 per year**, while also reducing winter peak demand (RMI Analysis using the [Green Upgrade Calculator](#)).
- Electric resistance space and water heating are [prevalent in Maryland](#), used for space heating by about 15% of single-family homes and about a quarter of multi-family units. Heat pump incentives through EmPOWER remain a clear pathway to equip these households with efficient technology and reduce system-wide demand.

Transitioning away from fuel oil space and water heating:

Households using fuel oil for space and water heating face high and volatile costs. Switching to heat pumps can:

- Save households around [\\$1,000 per year](#) on energy bills
- Deliver immediate bill reductions
- Minimize additional electricity demand and deliver broader system-wide benefits

Incentivizing grid-interactive water heaters:

Another benefit of EmPOWER is that it provides ratepayers with rebates to install technologies that can strategically conserve energy and reduce demand. For example, [grid-interactive heat pump water heaters](#) are highly efficient systems that store heat and energy when energy supply is abundant and avoid consumption when energy demand is tight, stabilizing the grid without interrupting service for households.

EmPOWER is a key affordability program that has delivered energy and bill savings for Maryland residents for almost two decades. Continued investment in its future will allow EmPOWER to realize the state's full potential of energy savings.