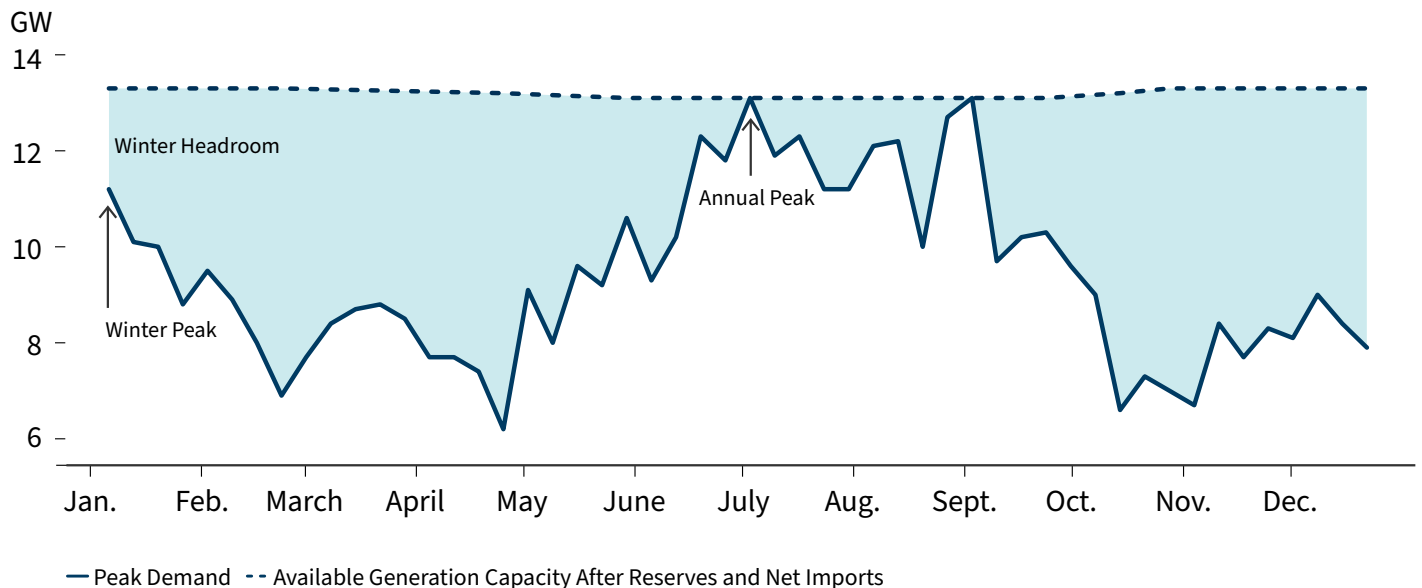


Maryland can put downward pressure on electricity rates by deploying heat pumps to better utilize the grid

Increase grid utilization



Maryland has roughly 2 gigawatts of winter headroom, resulting in underutilized winter grid capacity. This is enough room to add heat pumps in 1.7 million homes — **3 times the number today** — within the current grid. This makes better use of Maryland's existing electric grid.

Reduce electricity rates

6%



Heat pumps increase electricity sales across existing fixed grid costs, putting downward pressure on electricity rates. Upgrading all 1.7 million homes to a mix of all-electric and hybrid heat pumps could reduce electricity rates by 6% relative to what they would otherwise be, **saving customers \$132 annually, or \$324 million per year across all customers.**

Reduce emissions

26%



Upgrading all 1.7 million homes to heat pumps could cut Maryland's residential emissions **by 26%, or 5.2 million tons of CO₂.**

Policy recommendations

1. The governor should **establish an ambitious 2030 heat pump target** and explicitly include it in Maryland's electricity affordability plan. Growing from roughly 550,000 homes with heat pumps today to 800,000 by 2030 illustrates an impactful, actionable goal given annual HVAC replacements and adopting the below policies.
2. The Maryland Public Service Commission (PSC) should **direct EmPOWER utilities to prioritize all-electric and hybrid heat pump incentives over air conditioners within their energy efficiency program** to maximize immediate downward pressure on rates.
3. The PSC should **require utilities to reform residential electric rates** to more accurately reflect seasonal and marginal system costs.
4. The Maryland Department of Environment should **leverage clean heat policies to encourage heat pumps when central air conditioners are replaced**.
5. The Maryland Department of Labor should **adopt electric-friendly codes for new construction**, with local jurisdictions adopting and enforcing these codes.
6. The PSC should **integrate beneficial electrification into long-term gas and electric utility planning frameworks**, ensuring infrastructure decisions account for heat pumps' potential to improve grid utilization, reduce peak demand, and avoid unnecessary gas-system investments.

