

2023 Maryland Clean Energy Summit

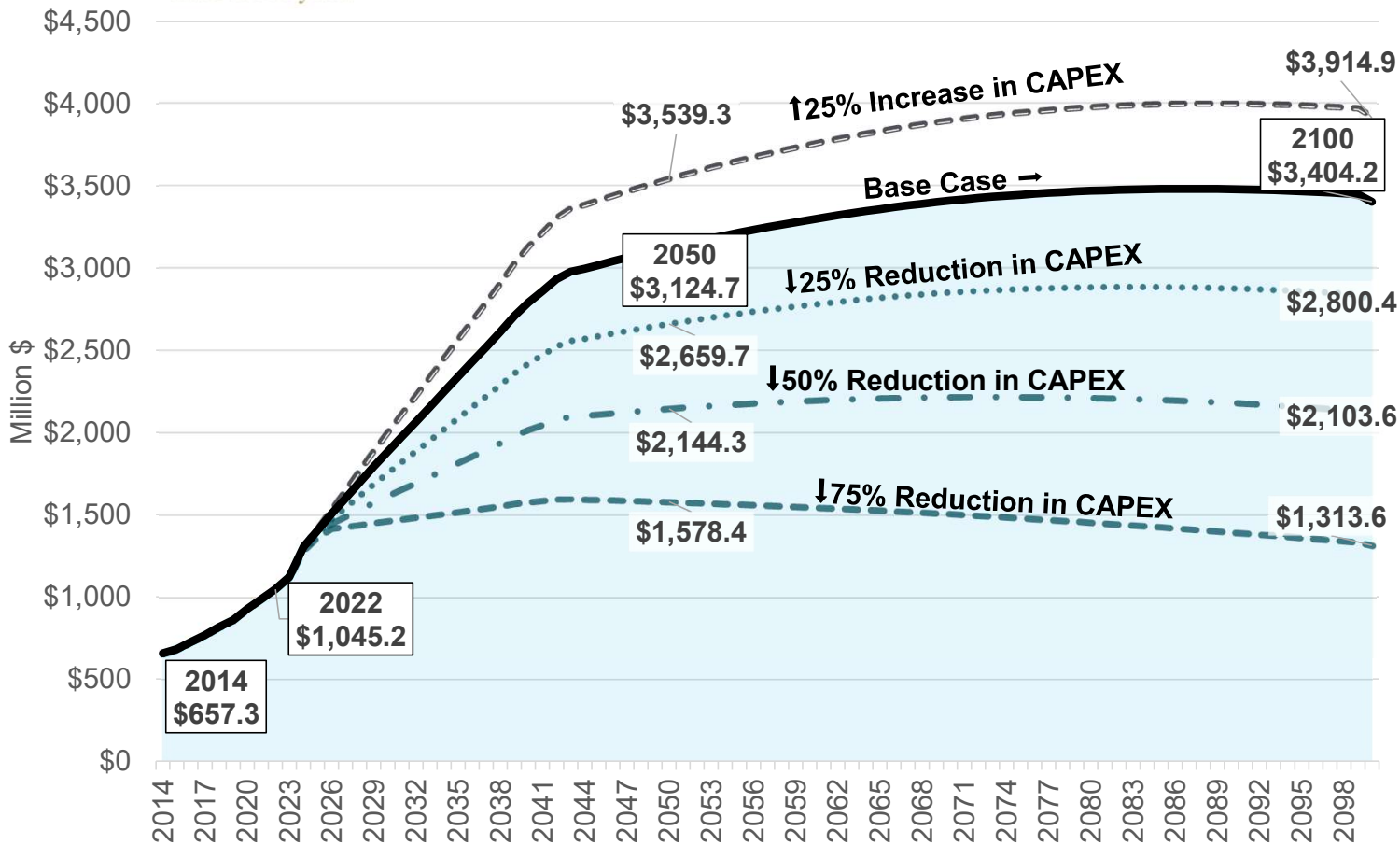
Plenary I: Decarbonization Through Electrification

David Lapp, Maryland People's Counsel

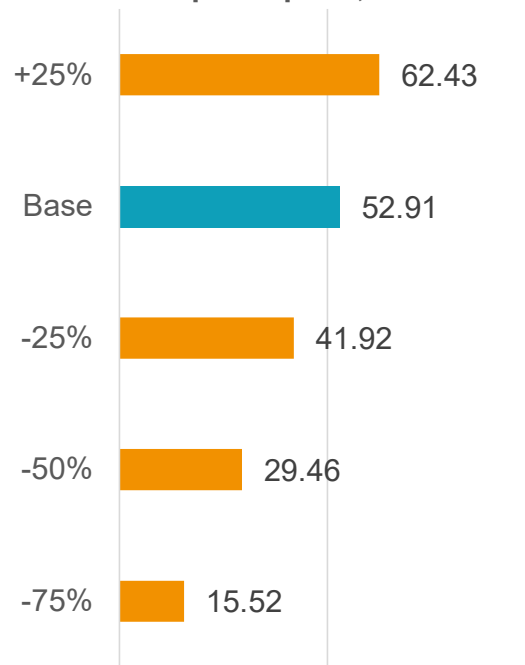
Maryland Clean Energy Center

17 October 2023

Cost savings potential



MD Gas Capital Spend, 2024-2100



(Billion \$)



Gas main



Gas service line



Gas regulator and meter

Individual Building Costs – BGE example

- More than \$6,343 capital costs per house, on average
- Full recovery occurs over 50 years, at total cost of more than **\$19,000** per house
- A customer that electrifies will not use service line, meter, regulator
- Costs are potentially shifted to remaining gas customers

These individual building costs exclude the systemwide costs that individual customers also pay.

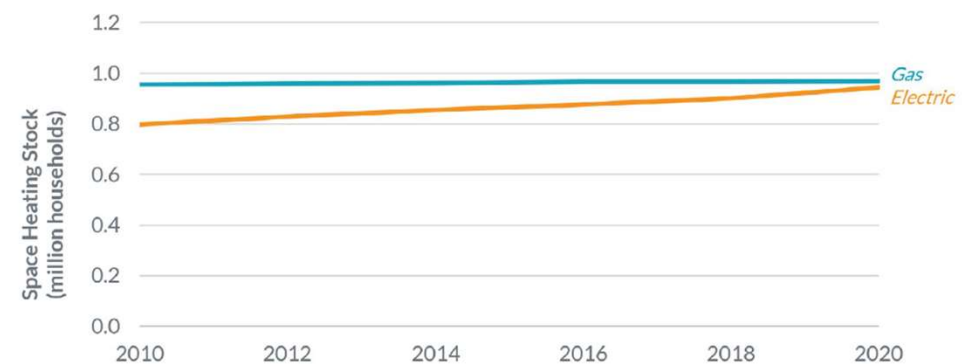
Electrification

Installed costs of residential retrofit*	
Electrification—heating <i>and</i> cooling with heat pump	Replacement of gas furnace and AC unit
\$8,000	\$11,000

* Less, B. D., et al. 2021. *The Cost of Decarbonization and Energy Upgrade Retrofits for US Homes*. Lawrence Berkeley National Laboratory. Available at: <https://escholarship.org/uc/item/0818n68p>.



Figure 1. Gas and Electric Space Heating Stock in Maryland Households, 2010-2020



Source: US Census Bureau: American Community Survey. Table DP04: Selected Housing Characteristics for Maryland, 5-year Estimates. June 2, 2022. Available at: <https://data.census.gov/cedsci/table?q=DP04&g=0400000US24&tid=ACSDP5Y2020.DP04>.

Electrification grants, credits, rebates

- IRA Tax credits
- IRA Rebates
- EmPOWER incentives
- Other Maryland incentives