

# Maryland Building Energy Transition Implementation Task Force

Cost of Decarbonization Summary and Key Takeaways

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- **AECOM Overview & Support**
- **LBNL Covered Buildings Summary**
- **Rewiring America Residential Buildings Summary**

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# AECOM Overview

## Who are we?

A technical advisor with a deep bench of energy and decarbonization expertise.

## Why are we here?

To provide data driven policy and funding analysis where strategically needed.

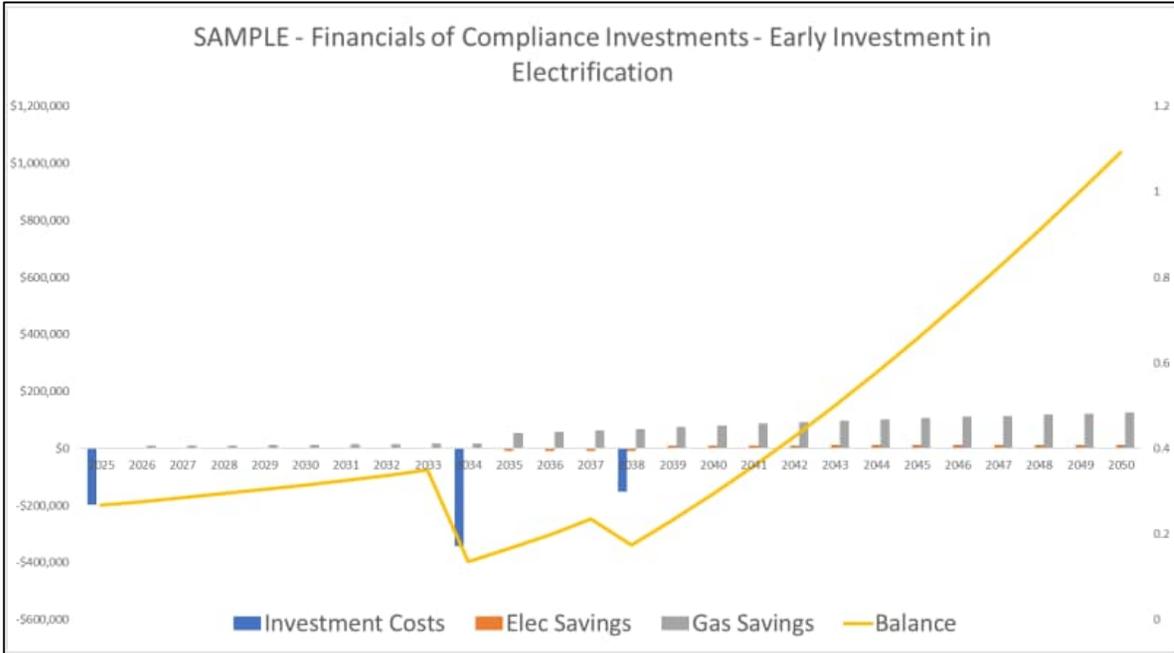
## How can we help the Task Force?

With data driven analyses that guide the development of Task Force recommendations.

# BEPS Covered Building Decarbonization: Summary



Early investments in electrification and energy efficiency will pay large dividends in future electric and gas savings



## Costs and Savings of Investments in Energy Efficiency and Electrification

Total Electrification Investments: **\$6.4B**

Total Efficiency Investments: **\$8.8B**

Net Cost Savings of All Investments by 2050: **\$4.5B**

Net Cost Savings of All Investments by 2050: **\$4.5/SF**

## BEPS Covered Building Decarbonization: Key Takeaways



**\$15.2B**

- The projected cost for electrification and efficiency investments to decarbonize comes out to \$15.2B from 2025 – 2040.

**\$1B/year**

- The annualized projected cost of decarbonizing all covered buildings is \$1B per year

**\$1/SF/year**

- On average, the capital cost to fully decarbonize for covered buildings is \$1/SF/yr

**50%**

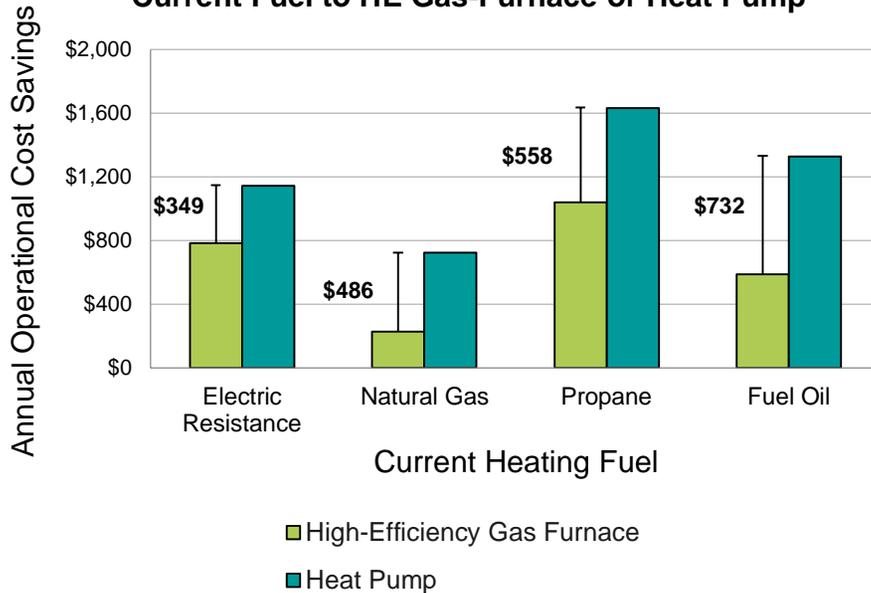
- Roughly 50% of covered buildings are financeable.

# Residential Building Decarbonization: Summary



Incentives for fossil fuel upgrades make HE Gas Furnaces more affordable than Heat Pumps. However, the operational cost of Heat Pumps is lower than that of HE Gas Furnaces.

Annual Operational Cost Savings of Switching from Current Fuel to HE Gas-Furnace or Heat Pump



## HVAC Electrification Pay Back Period with Current Incentives

\*AMI = Area Median Income

\*\*Current funding covers only a portion of households

< 80% AMI, No Upfront Cost	511,381 Households	Instant Savings
< 80% AMI	18,644 Households	0 - 4 Years
80 - 150% AMI	649,638 Households	Instant Savings
> 150% AMI	469,008 Households	12 - 35 Years

\*Note:

- Low income households qualify for MEA, DHCD and IRA Rebates.
- Middle Income households qualify for IRA Rebates.
- High income households qualify for IRA Tax credits.

# Thank You