



2023 ENERGY STAR Products Partner Meeting

Engaging Customers with the ENERGY STAR Home Upgrade to Save Up to 30% on Energy Bills

Presenters:

Daniel Lawlor – US EPA

Danielle Hoffer – US EPA

Casey Murphy – Pearl Certification

Leslie Carpenter – Appalachian Power

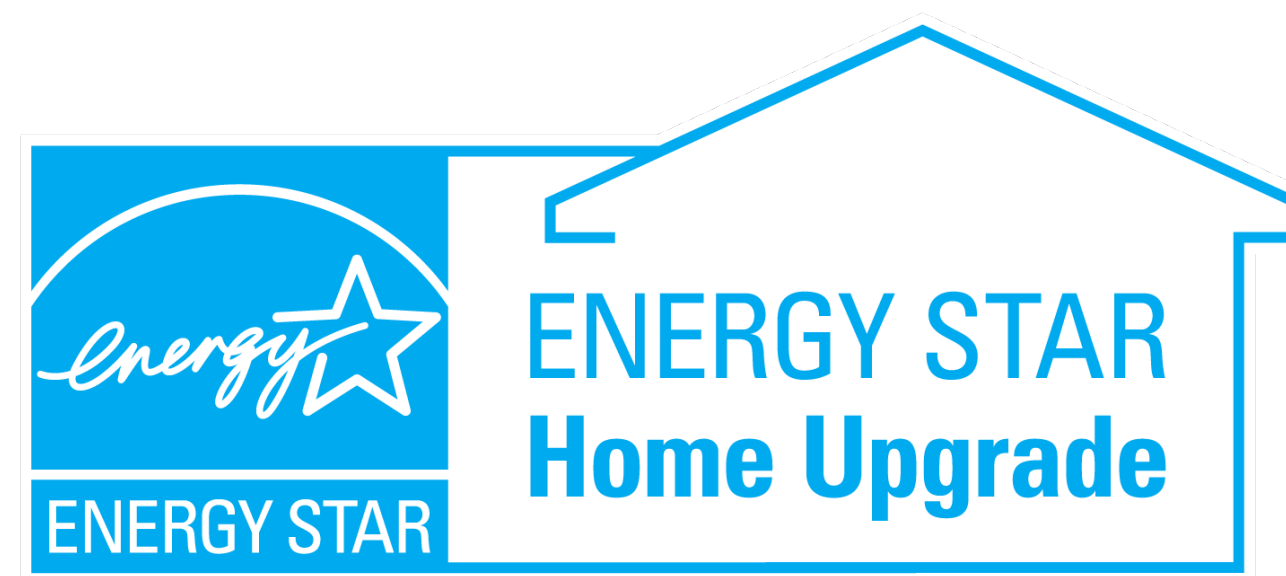
September 26, 2023





AGENDA

- ENERGY STAR Home Upgrade Overview
- Consumer & Partner Resources
- Leveraging Opportunities
- Savings Analysis
- Speaker Presentations
 - Leslie Carpenter
 - Casey Murphy
- Questions?

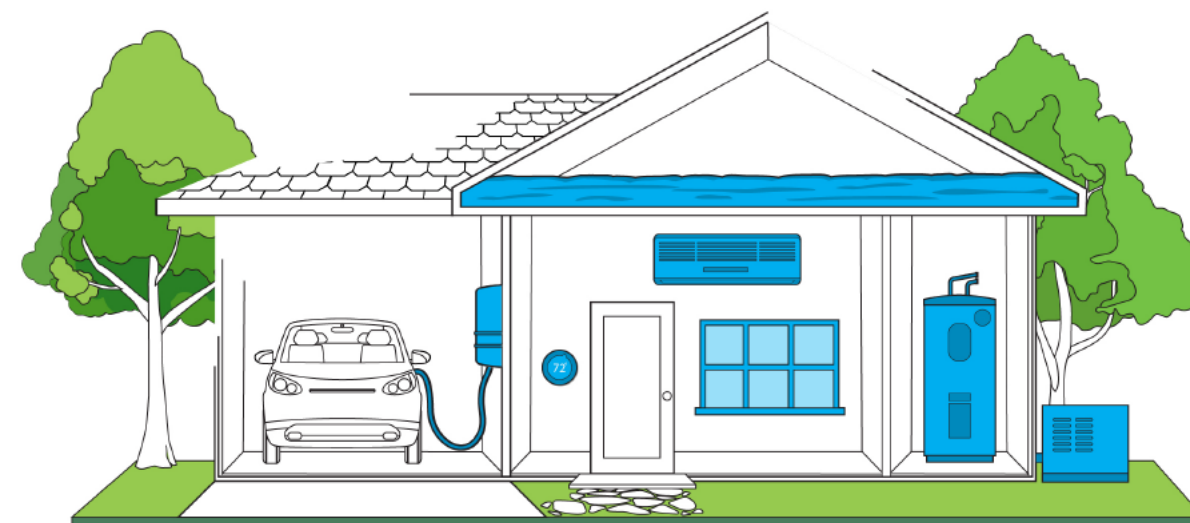


What is the ENERGY STAR Home Upgrade?

The ENERGY STAR Home Upgrade is a set of six generally applicable, electric energy efficiency improvements designed to work together to deliver significant energy and cost savings

The measures in the ENERGY STAR Home Upgrade include:

- Clean Heat (plus efficient cooling)
- Super-Efficient Hot Water
- Smart Climate Controls
- High-Performing Windows or Storm Windows
- Well-Insulated Attic
- Electric Ready





ENERGY STAR Home Upgrade Tool

A one-stop-shop for consumers to navigate the upgrade process:

- Learn about the benefits of each potential upgrade
- Find certified models
- Calculate potential savings
- Learn about rebates/financial incentives
- Find equipment manufacturers and service providers
- Acts as a "home" for widely used ENERGY STAR resources

CLEAN HEATING AND COOLING ▾

Switch to an ENERGY STAR certified heat pump to save energy and money year-round. Find buying and installation guidance to help you choose the right equipment. Learn about incentives and savings and get tips for using and maintaining your new equipment. [LEARN MORE →](#)

SUPER-EFFICIENT WATER HEATER ▶

SMART THERMOSTAT ▶

WELL-INSULATED AND SEALED ATTIC ▶

HIGH PERFORMING WINDOWS OR STORM WINDOWS ▶

ELECTRIC VEHICLE READY ▶

ALL ENERGY STAR HOME UPGRADE!



HEATING & COOLING



WATER HEATER

CLEAN HEATING AND COOLING

An ENERGY STAR Home Upgrade includes switching to an ENERGY STAR certified heat pump. More efficient than furnaces or boilers, heat pumps serve double duty with heating and cooling, making this investment usable year-round. Combine this upgrade with other high impact energy-efficiency improvements to achieve significant energy and cost savings while transitioning from fossil fuels for a cleaner, healthier, and more comfortable home.



IS IT TIME TO REPLACE MY HVAC SYSTEM?

In most cases, your HVAC equipment shows signs that it is underperforming well before you reach the point of needing an emergency replacement. Recognizing the symptoms early can help you plan for a replacement that will not only keep your home comfortable year-round but will save you money as well.

It May Be Time For A Replacement If: ▶



WHAT KIND OF HEAT PUMP SHOULD I CHOOSE?

If you currently have a furnace or boiler, upgrading to an ENERGY STAR certified heat pump can help you transition from fossil fuels for a cleaner, healthier home. Here are a few different types of heat pump systems you should consider as part of your ENERGY STAR Home Upgrade:

Types Of Heat Pump Systems ▶



HOW CAN I MAKE THIS UPGRADE MORE AFFORDABLE?

Upgrading your HVAC system can be a major investment, even if it is an investment that leads to energy bill savings for years to come. Take advantage of available rebates, tax credits and other special financing to help reduce the upfront cost.





Marketing Toolkit

- Social Media Graphics and Posts
 - General
 - Product-specific
- Web Banners & Buttons
- Educational Graphic
- Home Upgrade Factsheets
- Home Upgrade Declaration Sheet
- Coming Soon! New graphic and 60 sec video ad





How to Participate

- Current ENERGY STAR Partners can leverage their existing partnership to use the ENERGY STAR Home Upgrade as a marketing platform and/or a framework
- A new partnership opportunity for companies and community-based organizations that function as a concierge for multiple energy efficiency home upgrade services
 - Includes those that can assess homes for the appropriate upgrades and facilitate or perform the installations
- Developing new partnership opportunity for state energy offices, similar to existing Energy Efficiency Program Sponsors partnership





How can ENERGY STAR Home Upgrade be leveraged?

Marketing Platform

- Leverage the cache of an ENERGY STAR-branded platform supported by a comprehensive set of materials, messaging and media outreach

Framework for Tax Incentives

- Federal income tax incentives are aligned around the elements of the ESHU

Framework for Incentive Programs

- Bundle incentives (utility, state, and federal) and cross market programs

Mechanism for Addressing Energy Inequity in Existing Homes

- Bolster/expand targeted support through site-specific utility investments (i.e. on-bill tariffs) with a defined platform backed by the credibility of ENERGY STAR



Savings Analysis Preliminary Results

ENERGY STAR Home Upgrade

- Averages always positive energy & cost savings
- National Average of 57% savings on energy use & 31% savings on energy bills
- Provides savings consistent with HOMES program
 - Bundle for every climate zone
 - ASHP/MSHP individually for most of the country
- Heat Pump Heating & Cooling Replacement provides positive bill savings on average in every climate zone



HEATING &
COOLING



WATER
HEATER



SMART
THERMOSTAT

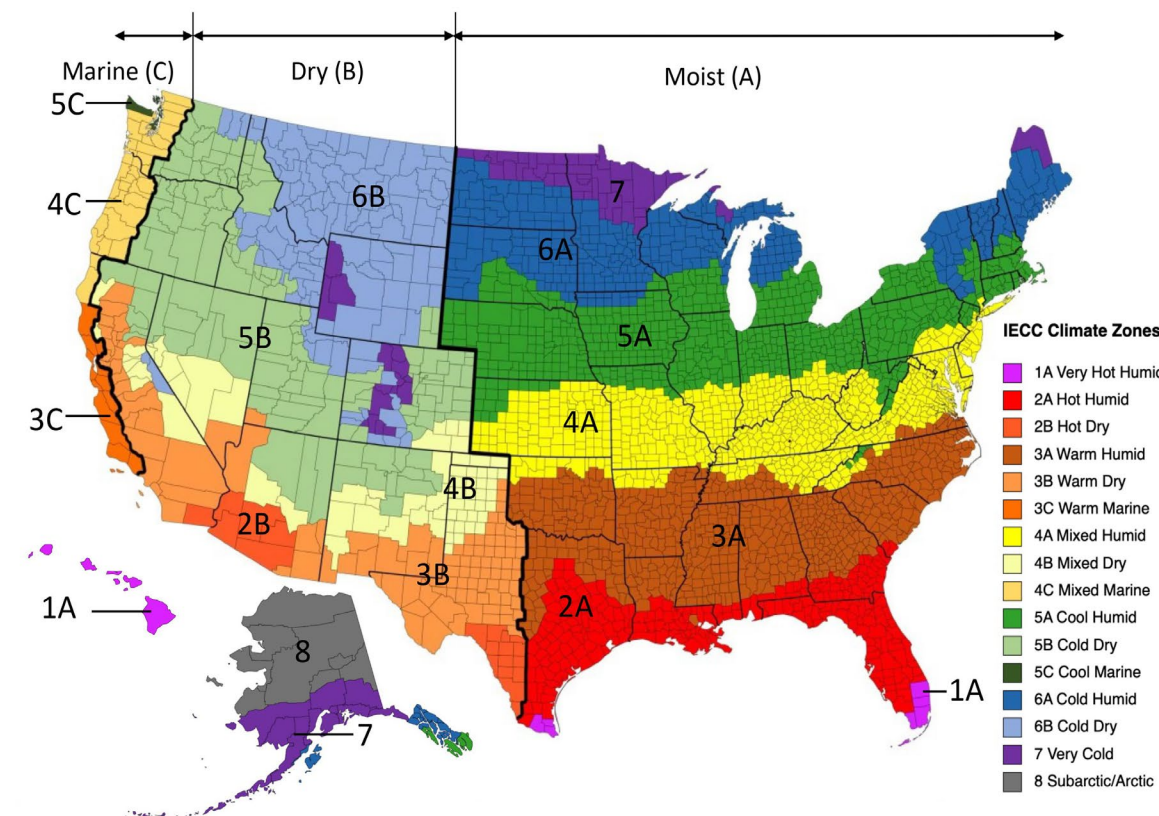


ATTIC
INSULATION

ENERGY STAR Home Upgrade Modeling

- Conducted analysis using ResStock to identify the percent energy system savings (energy usage savings and bill savings) with the ENERGY STAR Home Upgrade (ESHU) measures by climate zone & state
- Measures modeled individually and as a bundle include ENERGY STAR Certified:
 - Air Source Heat Pump / Mini-Split Heat Pump
 - Heat Pump Water Heater
 - Smart Thermostat
 - Attic Sealing & Attic Insulation

Goals were to identify where ESHU can deliver savings of 20-35% (per the HOMES rebate program) and bill savings, and to identify target markets for ESHU promotion



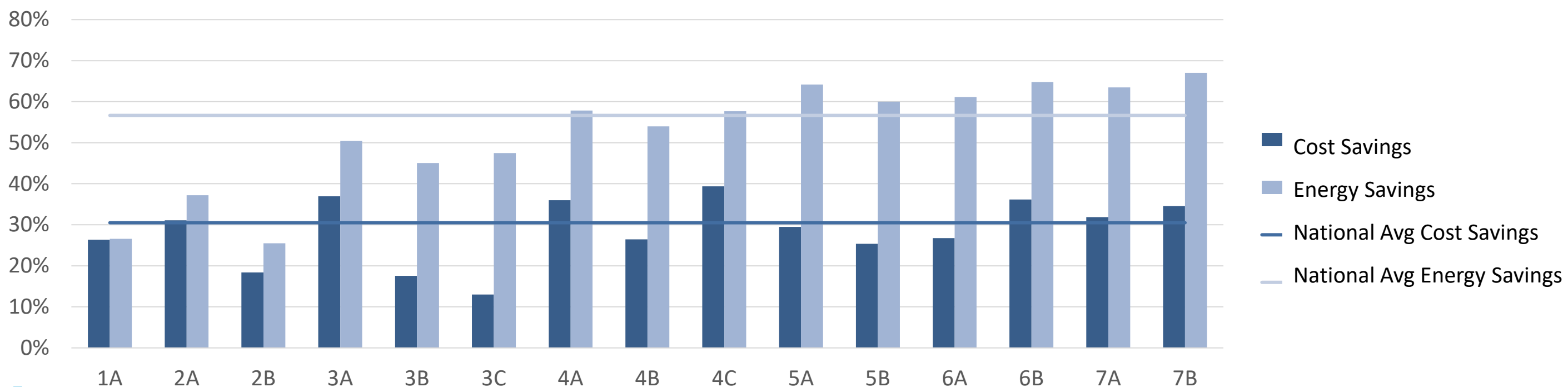


Preliminary Results *

Home Upgrade Bundle

Combination of ASHP/MSHP, HPWH, Smart Thermostat, & Attic Insulation and Sealing
(Does not include windows or electric ready measures)

- National average of 57% savings on energy use, ranging from 26%-67%
- National average of 31% savings on energy bills, ranging from 13% - 39%
- Positive energy and cost savings on average in every climate zone



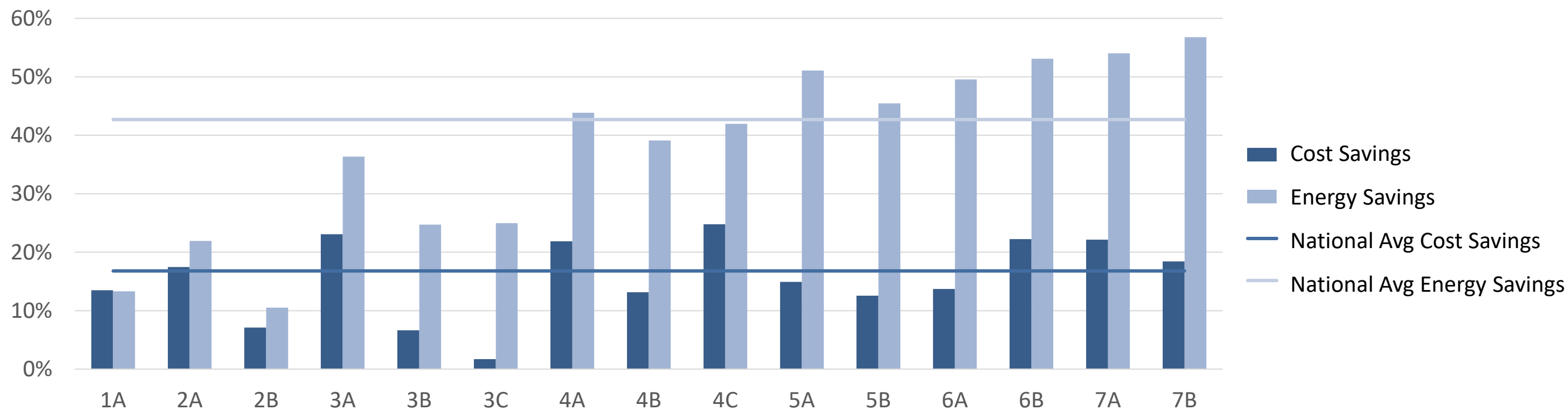
* By climate zone average (not individual homes)



Preliminary Results

Individual Measure: Air Source & Mini-Split Heat Pump

- Max Load Sizing with Electric Resistance Backup
Cold Climate Spec for Climate Zones 5-7
- National average of 43% savings of energy use, ranging from 11% - 57%
- National average of 17% savings on energy bills, ranging from 2% - 25%

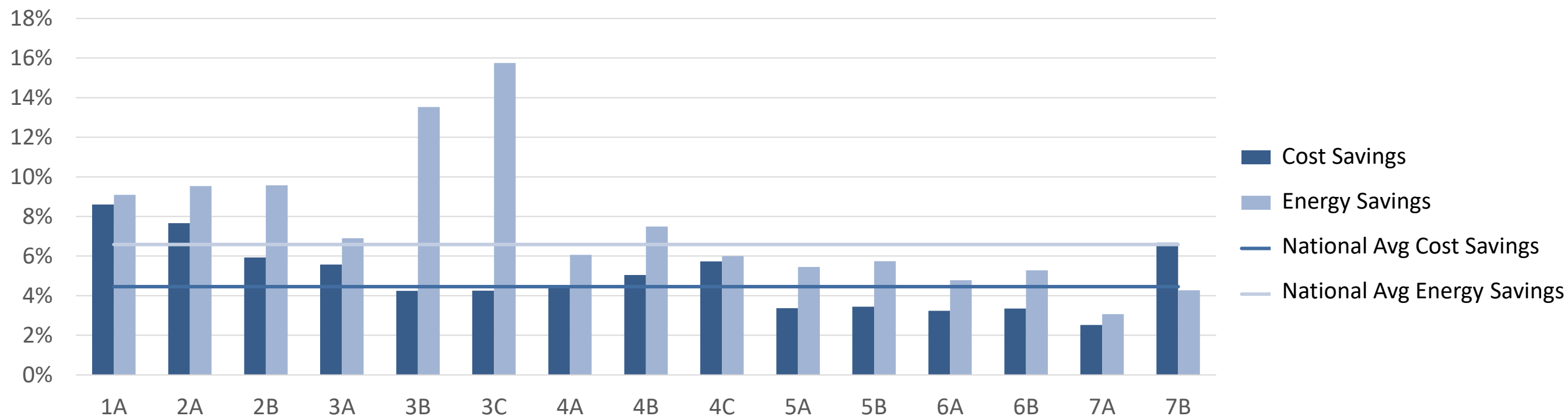




Preliminary Results

Individual Measure: Heat Pump Water Heater

- National average of 7% savings on energy use, ranging from 3% - 15%
- National average of 4% savings on energy bills, ranging from 3% - 9%

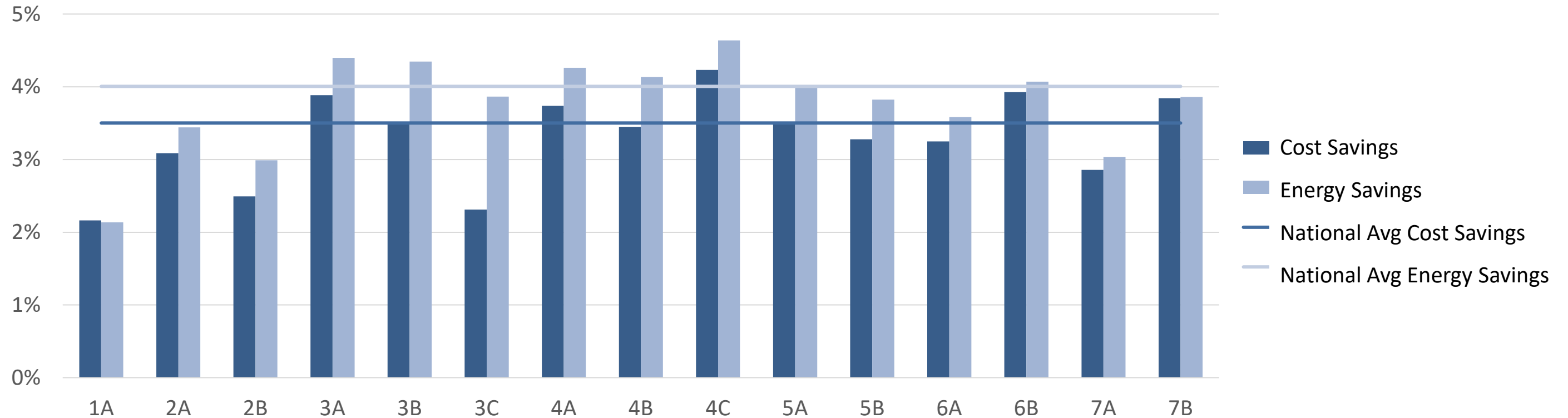




Preliminary Results

Individual Measure: Smart Thermostat

- National average of 4% savings on energy use, ranging from 2% - 5%
- National average of 3.5% savings on energy bills, ranging from 2% - 4%



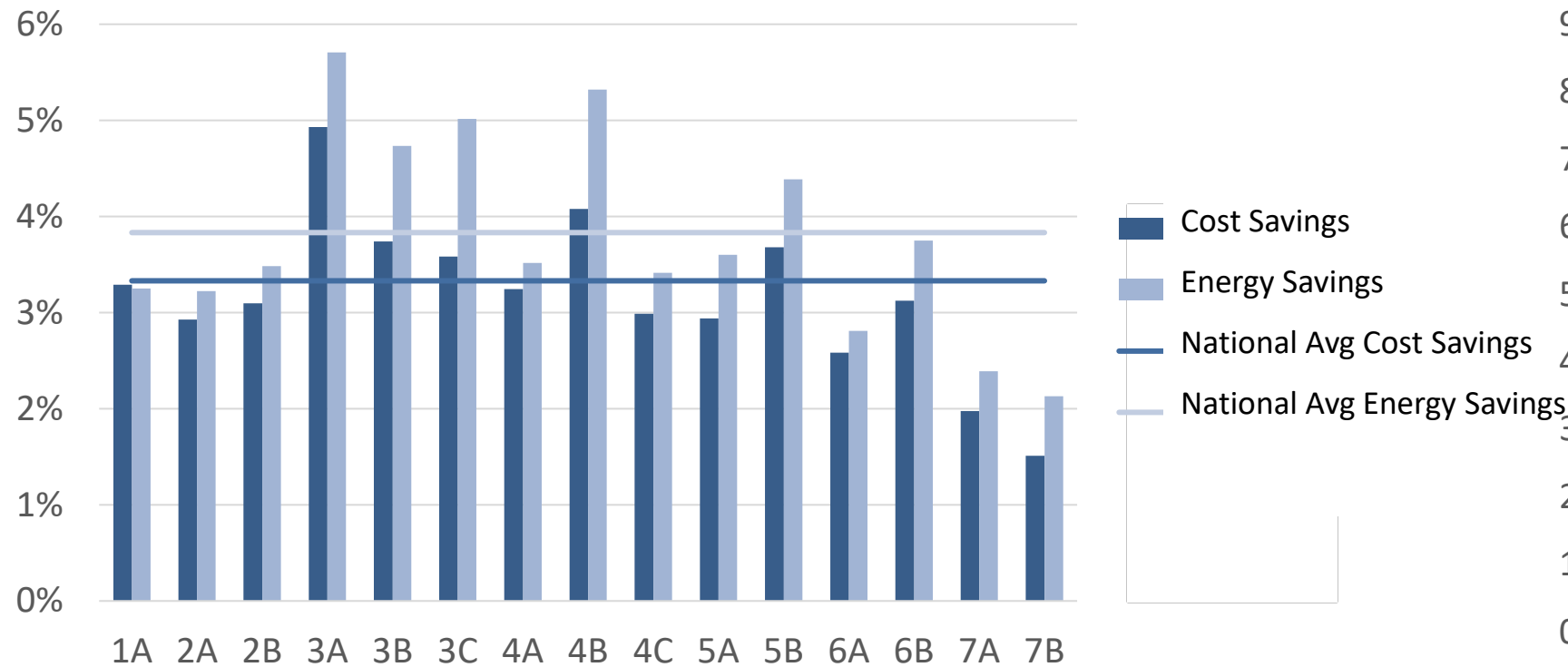


Preliminary Results

Individual Measures: Attic Insulation & Sealing

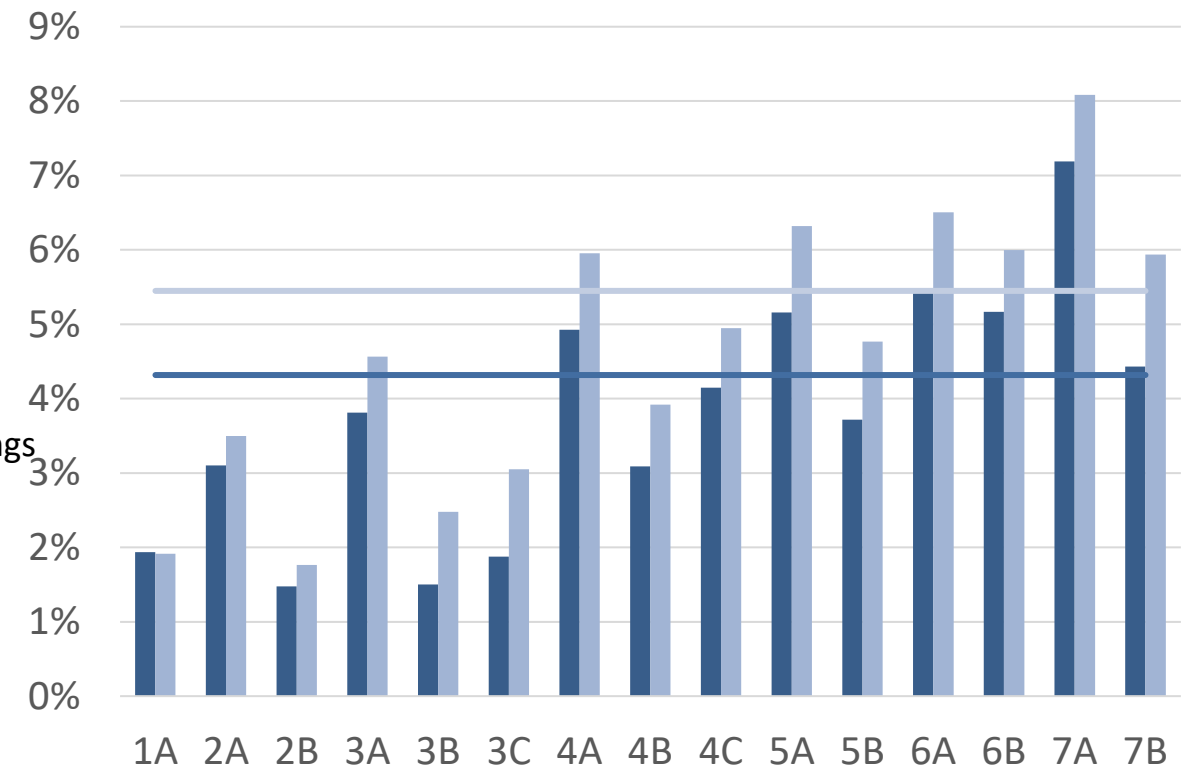
Attic Insulation

- National Average of 4% savings on energy use, ranging from 2%-5.5%
- National average of 3% savings on energy bills, ranging from 1.5% - 5%



Attic Sealing

- National average of 5% savings on energy use, ranging from 2%-8%
- National average of 4% savings on energy bills, ranging from 1.5% - 7%





THIS WAY TO A CLEAN ENERGY FUTURE



energystar.gov/earthday

Moving Forward

Future Analysis

- Dual-fuel w/ HP sized for cooling load
- Instances where bills could increase

Working with partners to engage customers



Public Education Campaign with ENERGY STAR® Home Upgrade

September 2023



TAKE CHARGE™

Why Public Education?

OBJECTIVE:

- Identified a need to promote Energy Efficiency (EE) as a lifestyle and launched initial campaign in July 2022.
- Wanted customers to take charge of their energy usage.
- Needed to promote a more positive image of the overall company.

KEY CONCEPTS:

- Empowered customers to own their energy use.
- Created tips and tools to teach customers the importance of EE as a lifestyle.
- Provided online calculators to estimate the average annual kWh and cost of common household appliances.
(VA: <https://va.appliancecalculator.com/>;
WV: <https://wv.appliancecalculator.com/>)

TACTICS:

- Website landing pages
- Email
- Collateral pieces
- Paid Media
 - Digital
 - Social
 - Streaming video



Public Education 2.0



HEATING & COOLING



WATER HEATER



SMART THERMOSTAT



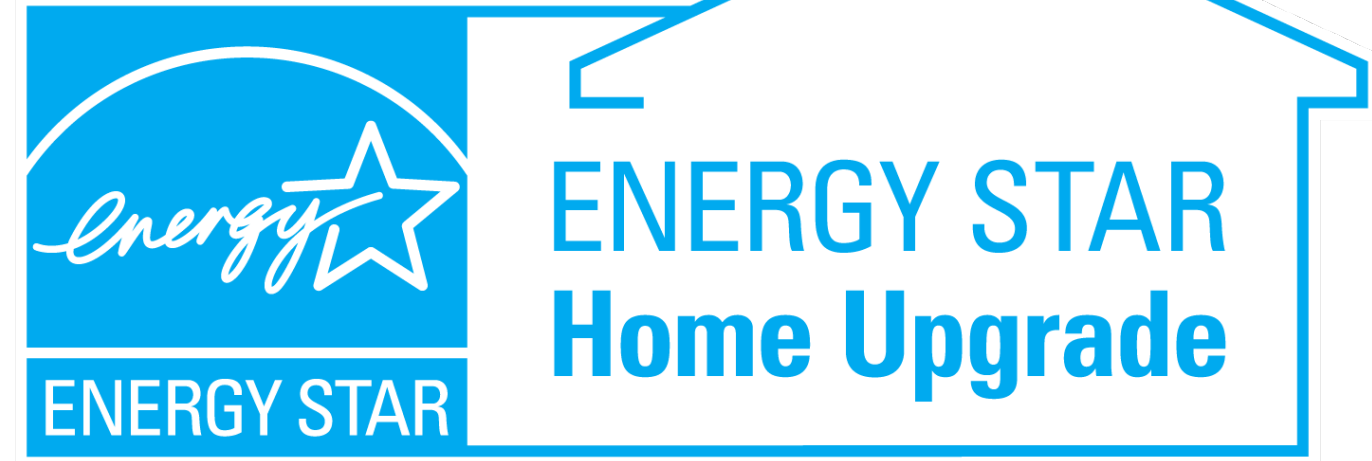
ATTIC INSULATION



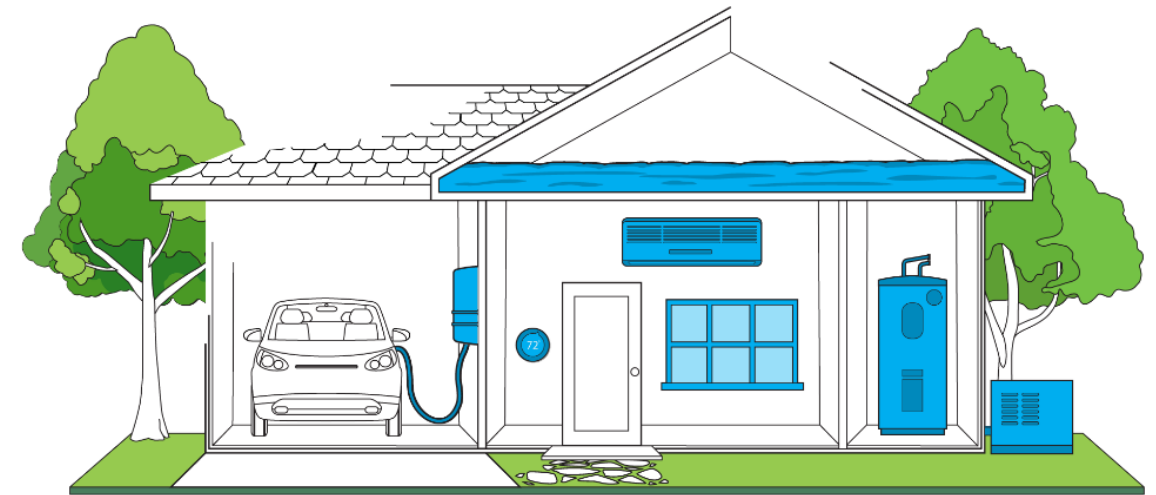
WINDOWS



ELECTRIC READY



- Launched April 2023
- Included an Interactive Checklist for customers that:
 - Promoted the top six ways to TakeCharge of electric bills.
 - Used the ENERGY STAR® Home Upgrade as a guide.
- Appalachian Power (APCo) and ENERGY STAR teams worked together to customize materials to meet campaign needs.
- Featured a main idea around each of the six (6) areas represented in the ENERGY STAR Home Upgrade.
 - CTAs linked to:
 - APCo EE Programs & Rebates
 - ENERGY STAR & Ways to Buy
 - Federal Tax Credits



[TakeChargeVA.com/BrightIdeas](https://www.takechargeva.com/BrightIdeas) and [TakeChargeWV.com/BrightIdeas](https://www.takechargewv.com/BrightIdeas)

Public Education 2.0 cont.



Save Energy and Money

Learn how home upgrades can help you save - and find available tax credits and rebates!



TAKE CHARGE™



Bright Ideas to Save Energy




TAKE CHARGE™



It's Time to Take Charge!

Learn about six key impact areas that can help you better manage your electric bill.



TAKE CHARGE™



CAMPAIGN ACHIEVEMENTS:

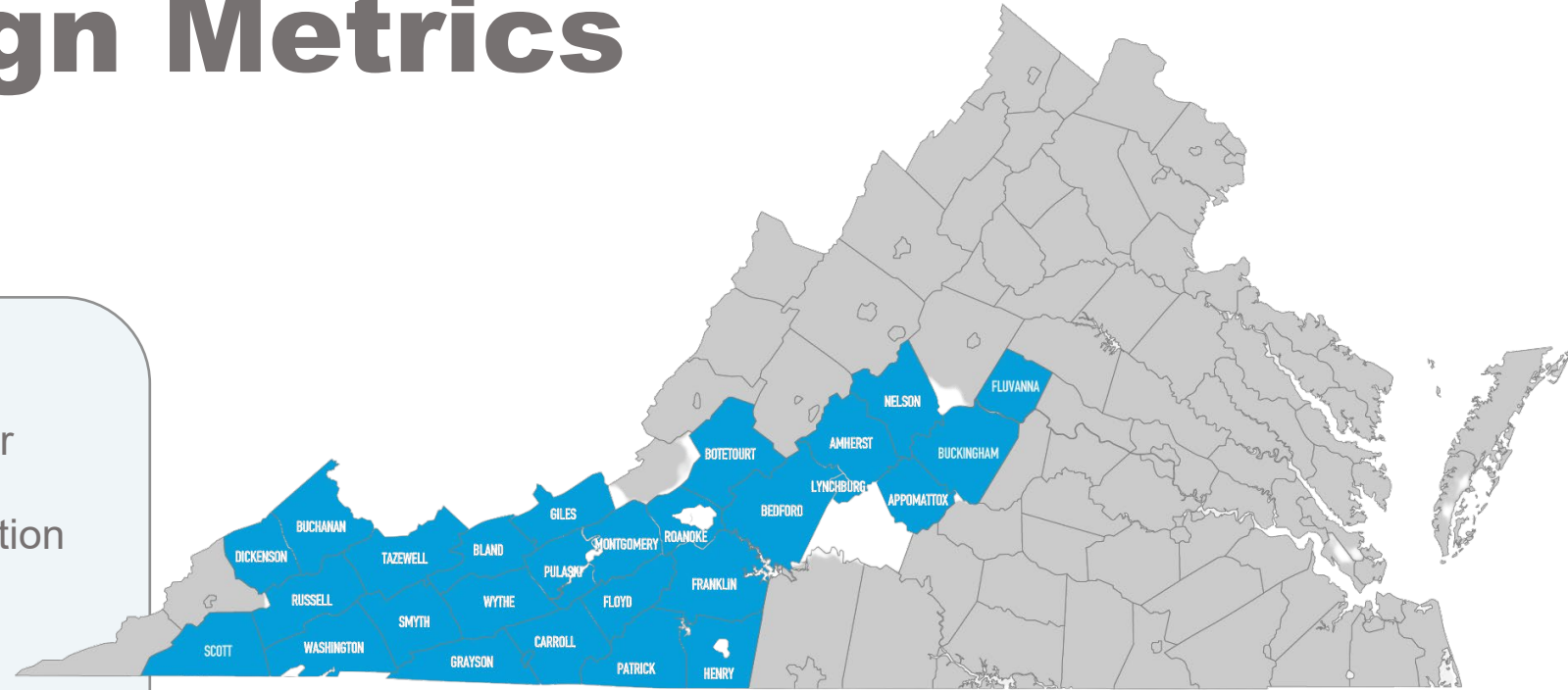
- Capitalized on the success of the original Public Education campaign to move customers to the next level of energy efficiency.
- Promoted equitable programs by meeting individual customers where they were in their specific EE journeys regardless of their income levels.
- Utilized ENERGY STAR content and materials to help customers get started making larger EE updates at their own pace.
- Helped customers understand the full benefits of upgrading to an energy-efficient home by:
 - Identifying all eligible rebates and tax credits which could be stacked for maximum savings. (Visit [TakeCharge VA | Bright Ideas](#) or [TakeCharge WV | Bright Ideas](#) to take the quiz.)
 - Cross-marketing APCo EE programs with each other and the ENERGY STAR Home Upgrade.

Public Ed 2.0 Campaign Metrics

Notable State Specific Results

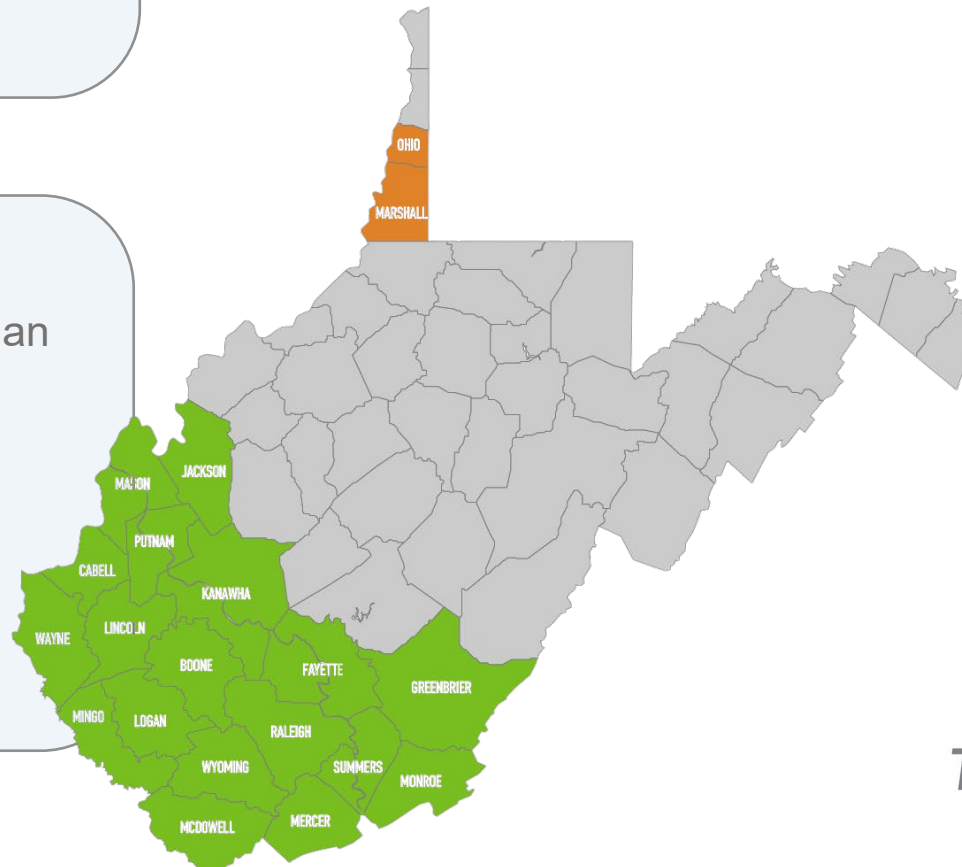
Virginia

- Display campaign CTRs were 233% higher than the 0.15% benchmark
- CTV campaign resulted in 98.06% completion rate (2.15% over benchmark)
- Facebook CTR was 108% higher than benchmark, and users 65+ most engaged



West Virginia

- Display campaign CTR was 120% higher than the 0.50% benchmark
- APCo campaign had a higher CTR and produced 61% of the clicks in WV Display
- APCo WV Display ad group performed the highest above benchmark with an overall 1.56% CTR.



TAKE CHARGESM

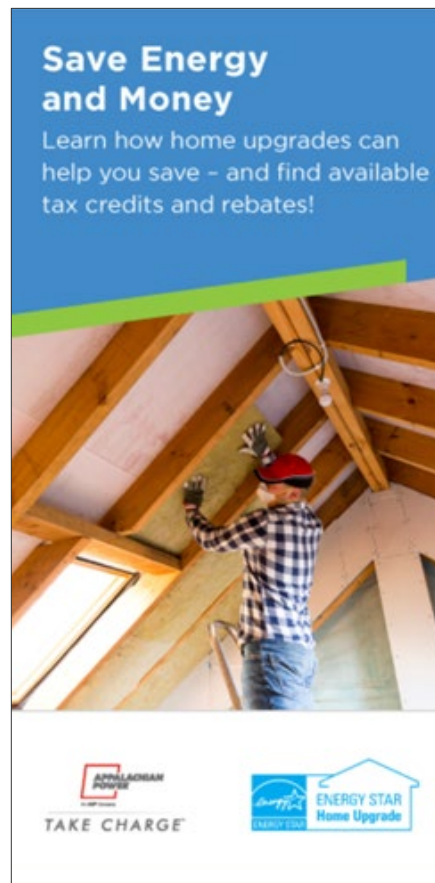
Public Ed 2.0 Overall Campaign Metrics

Metric	April – July 2023 Totals
Impressions	3,490,438
CTR	0.99%
Video Views	516,178
Clicks	38,100

CTR Benchmark for Facebook Traffic Ads: 0.90% | Google Video: 15% View Rate | Google Display 0.50% CTR | Digital Display Ads 0.15% CTR Benchmark | Textlink Native 0.30% CTR | VCR Benchmark for CTV Ads: 96%

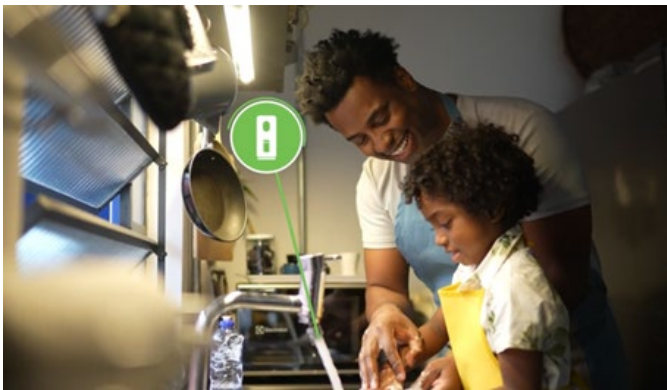
TakeChargeVA.com/BrightIdeas
TakeChargeWV.com/BrightIdeas

Top APCO Checklist Display Ad – APCo VA
3.05% CTR



Notable Creative

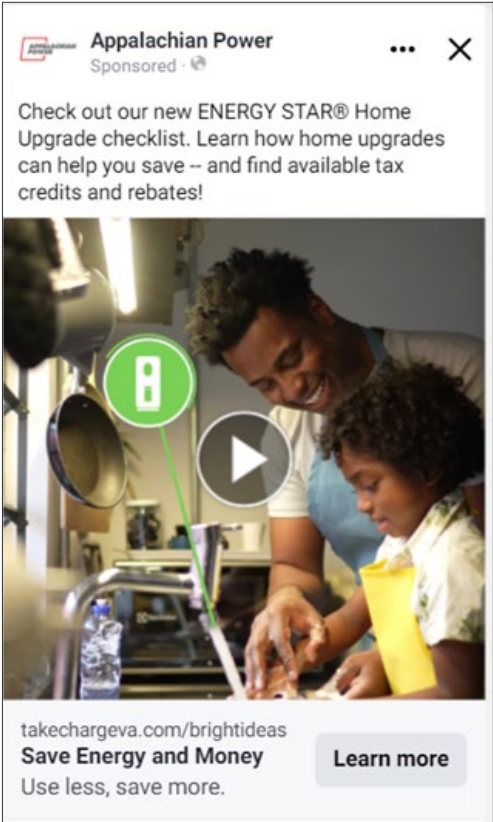
Top CTV Ad – APCo VA
98.06% Completion Rate



It's Time to Take Charge.
 Take our ENERGY STAR® Home Upgrade quiz to learn about six high impact areas for savings.

Top Display Ad - APCo WV
1.56% CTR

Top Facebook Traffic Ad – APCo VA
Live Video 3.43% CTR





Questions?

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Visit the ENERGY STAR Home Upgrade Tool:

www.energystar.gov/HomeUpgrade