The Role of High-Performance Builders, Utility Incentives, Industry Trends, and Technology required to Accelerate and Scale Zero Energy Homes of the Future Today

2024 High Performance Home Builder Summit Salt Lake City, Utah



Meet the Panel

MODERATOR

Mark Pignatelli, Director with ICF based in Boston, MA

PANEL

Megan Cordes, Director of Sustainability and Building Science for Beazer Homes based in Sacramento CA

Corey Self, Director, Corporate Sustainability and ESG Reporting for Pulte Group based in Atlanta, GA

Ben Schott, Senior Program Manager for BGE based in Baltimore, MD

Rebecca Smout, Senior Program Manager for Salt River Project based in Phoenix, AZ

Austin Pooley, Lead Specialist for CenterPoint Energy based in Houston, TX





Residential and C&I Director

Mark is an energy efficiency expert with more than 18 years of experience in the energy efficiency consulting industry. His passion is to create innovative solutions that reduce greenhouse gas emissions, enhance energy security, and improve the quality of life for communities.





Global advisory, technology services provider

50+ years in the energy business

Over 1,100 energy experts across North America, UK, India, China, and Ghana

200+ energy efficiency programs and \$3.1B in energy efficiency rebates

Top 60 utilities in North America

Supports all major energy NGOs, federal agencies, and state DOEs on energy issues

Largest implementer of electrification programs in the U.S

Carbon Neutral since 2006

54% Female Leaders



DSM and energy expertise



- Energy efficiency implementation
- Electrification programs
- Energy program design and potential studies
- Customer engagement and marketing campaigns
- IT solutions
- Resiliency plans
- Decarbonization
- Transmission
- Grid planning/ modernization
- Power project development and strategy



Baltimore Gas & Electric

Ben Schott
Sr Program Manager
Residential Energy Efficiency
Clean Energy Solutions







Maryland's largest electric and gas utility



1.3 million electric customers



700k gas customers

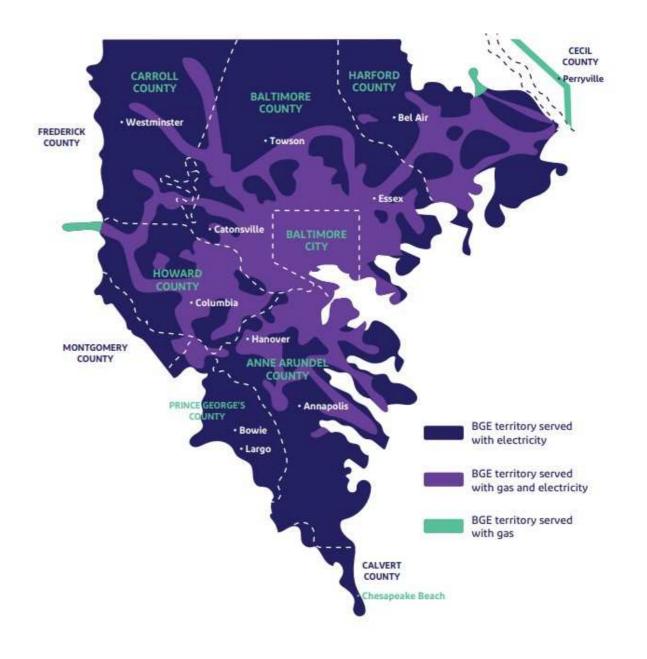
Path to Clean Goals

50% by 2030

Net zero by 2050

Reduction in our operational emissions

Target for operations-driven emissions







New Homes Program ENERGY STAR® Certified New Homes



14+ year ENERGY STAR® Partner



60+ builders enrolled



30,000+ homes completed to-date



\$35 million of incentives earned



2024 ENERGY STAR® Market Leader



Among the first to support NextGen® Homes



ENERGY STAR® Certified New Homes Builder Incentives



Higher rebates effective Jan 1, 2024



	ENERGY STAR®Version 3.1	ENERGY STAR® Version 3.2	ENERGY STAR® NextGen
Single-family Detached	• \$1,250	• \$1,950	• \$3,950
 Townhouse or Duplex 	• \$750	• \$1,400	• \$3,400
Two-on-Two Condo	• \$550	• \$675	• \$2,675





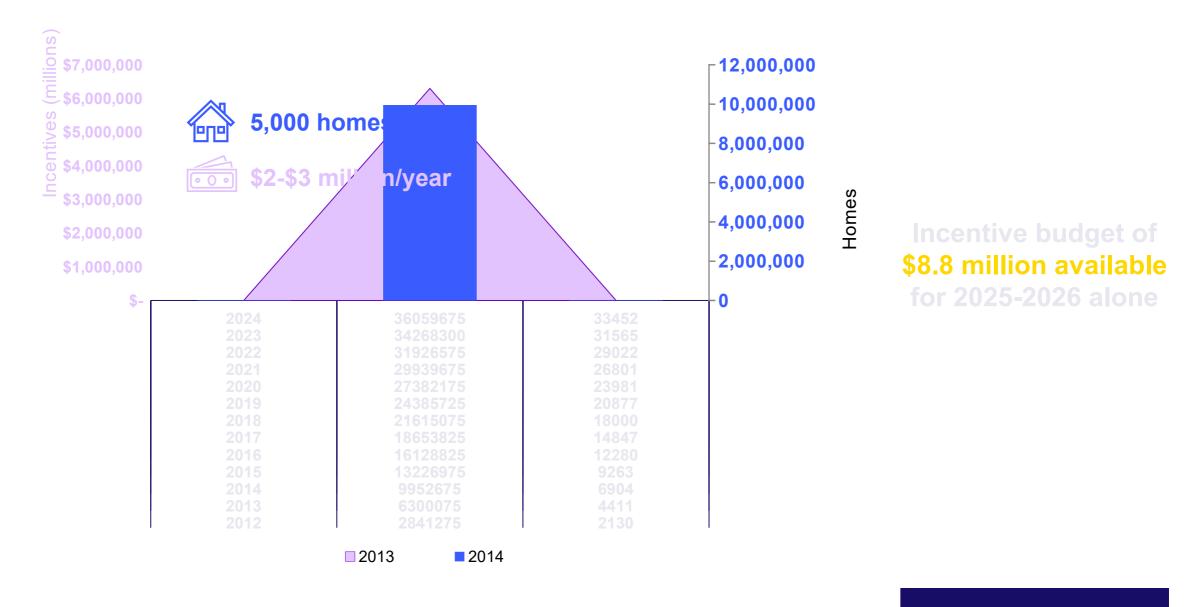
•	ENERGY STAR® Cert. Heat Pump Water Heater		• + \$1,000
•	High Effic Heat Pump, >15.2 SEER2, >8.5 HSPF2	•	+ \$450
•	High Efficiency Air Conditioner, >15.2 SEER2	•	+ \$200

•	HVAC Grade I Quality Install, ACCA 310				•	• + \$150	
				. <u>—</u> .			





Real money – predictable and consistent results



But why?



- 2006 NERC issued warning to Maryland that electricity supply and reliability were at risk if steps to reduce energy usage were not taken.
- 2008 EmPOWER Energy Efficiency Act established a statewide goal of 15% reduction in per capita electricity consumption and peak demand by the end of 2015
- **2017** Goal updated to 2% of gross annual energy sales through 2023
- 2022 Increases goals to 2.25% in 2025 and 2026, 2.5% in 2027+ Climate Solutions Now Act
- 2024 MWh Goals converted to GHG Goals

BGE proposes expanded efficiency, electrification, and load management programs

"energy efficiency is among the least expensive ways to meet the growing electricity demands of the State" (ld.§ 7-211(b))

\$0.03
cost per kwh saved

Supporting builders at every step



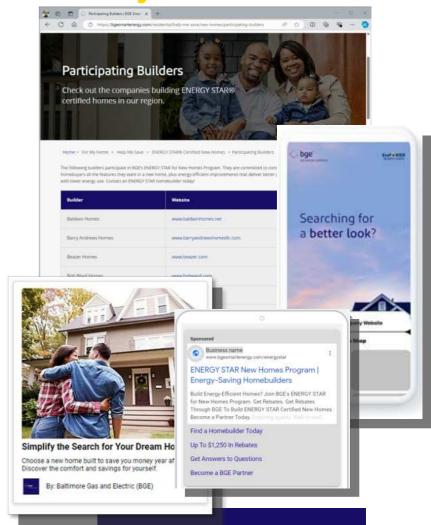
Sales tools



Media and outreach



Buyer demand





15+ years of partnerships























Rebecca Smout Senior Program Manager

Background

- ~ 24+ years at SRP
- ~ ASU Bachelor of Interdisciplinary Studies Business/Psychology
- ~ Certified Energy Manager
- ~ HERS Rater
- ~ Worked directly with Builders and Raters as Key Account Manager
- ~ Manage & develop SRP's residential new construction programs for single family and multi-family builders (give away \$\$\$)
- ~ In my free time...I like Basketball, Hiking, Eating, "Home Projects"...



The Speed of Change

 How long did it take people to adopt television?

22 years

How long to adopt the internet?

10 years

How about YouTube?

10 months

And Pokémon Go?

19 days

*Amount of time to 50 Million users



"There will be more change in the next five years than we've seen in the past 100 years."

Mike Hummel, (retired) General Manager and CEO, Salt River Project

EE Program for Single Family Residential New Construction



ENERGY STAR® HOMES



- Pay-for-Performance Incentive:
 - <u>\$0.12</u> per kWh saved <u>V3.1.</u>
 - \$0.15 per kWh saved V3.2 + \$600 Bonu
- Optional Rebates Available:
 - Electric Vehicle Ready \$300 /home
 - ES Heat Pump Water Heater \$400 /home
 - Multi-Speed ES Heat Pump \$500 /home

	ES 3.1	ES 3.2
Avg sft	2,200	2,200
Avg kWh	3,483	3,850
Performance Incentive (.12)	\$418	NA
Performance Incentive (.15)	NA	\$578
ES 3.2 Bonus	NA	\$600
EVR Bonus	\$300	\$300
HPHP Bonus	\$500	\$500
HPWH Bonus	\$400	\$400
Maximum Available	\$1,618	\$2,378



EE Program for Multi-Family Residential New Construction

ACHIEVEMENT	INCENTIVE
Tier 1: ENERGY STAR MFNC Version 1.1	\$300 per unit**
Tier 2: ENERGY STAR MFNC Version 1.2	\$400 per unit**
**Single-project (community) cap of \$150,000.	

Additional SRP requirements for MFNC

- ENERGY STAR Certified Wi-Fi thermostats
- Builder/developer must submit preconstruction application for SRP review and approval.
- **Extra Incentive \$100/unit for Disadvantage Communities.** (~Must Qualify for HUD or Low-Income Housing Tax Credit.)







- Lead Energy Efficiency Consultant
- Been with CenterPoint Energy since March 2018
- Worked at NRG Energy prior to CenterPoint
- Native to Houston, graduated from Texas A&M

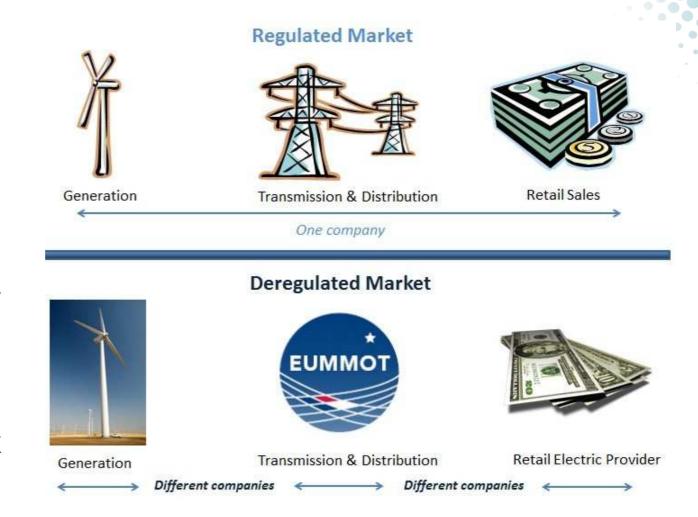






Transmission and Distribution Utilities

- Responsible for maintaining the poles, wires, and meters
- TDUs read meters and restore service when there is a power outage
- Regulated by the Public Utility Co mmission of Tex as (PUC)





CenterPoint Energy Electric Territory



The programs come from transmission and distribution charges paid by electricity consumers



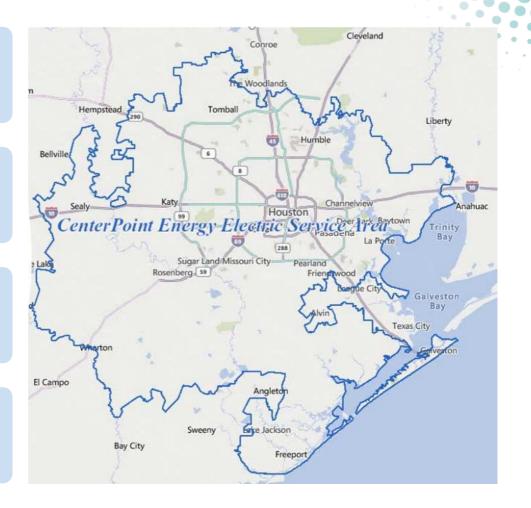
PUCT requires that CenterPoint Energy offers energy efficiency programs that provide value and verified savings



Avoid the cost of new capacity



Grid reliability





2024 High Efficiency Homes Program

Every home approved

Abov	e Code Home	Program lı	ncentives		
DOE Zei	ro Energy Ready	Home (DOE	E ZERH) \$50	00	
	ENERGY STAR	® Certified \$	250		
	RESNET HER	S Rated \$1	00		
	HVAC In	centives			
SEER2	15.2-15.9	16.0-16.9	17.0-17.9	18.0-20.9	21.0+
\$/Ton	\$25	\$75	\$100	\$125	\$150
Heat Pump Systems				\$75/Ton	
ENERGY STAR qualified Smart Thermostat			\$25/thermostat		
	Additional	Incentives	\$ 1.	- NY	
ENERGY STAR® qualified Hybrid Heat Pump Water Heater (HPWH)			\$800/HPWH		
ENERGY STAR® qualified Electric Vehicle Charger			\$35/Level 2 EVSE		
Induction Cooktop			\$5/Burner		
Solar PV (DOE ZERH only, 5kW Cap)		\$250/kW			

\$15/Home

Panel Discussion

