

October 23, 2024

Transportation Electrification

EV Phase 2 Portfolio Design: Engaging Key Stakeholders for Success

Goals

LEADING THE CHARGE FOR SUSTAINABLE MOBILITY



ALIGN WITH OBJECTIVES SET FORTH BY MARYLAND'S POLICIES that enable customers' decarbonization journey.



MANAGE THE ANTICIPATED SURGE IN DEMAND resulting from widespread adoption of EVs while promoting equity.



PROMOTE EV UPTAKE within the state through rebates, incentives, & enhanced public charging infrastructure accessibility.



CUSTOMER EDUCATION to raise awareness of EVs, charging options, and how to manage EV energy costs.



AN EXELON COMPANY







FINANCIAL INCENTIVES

Access to rebates and incentives for EV adoption and infrastructure investments, making the transition to electric vehicles more affordable.



IMPROVED CHARGING INFRASTRUCTURE

Enhanced access to public charging stations reduces range anxiety, promotes widespread EV adoption, and improves air quality by lowering vehicle emissions.



EQUITABLE ACCESS

Programs designed to ensure that all communities, especially underserved ones, have access to EV resources and incentives, promoting inclusivity in the transition to clean transportation.



bge

INFORMED DECISION-MAKING

Comprehensive customer education on EV benefits, charging options, and energy management, empowering consumers to make informed choices and optimize their energy costs.

Overview

EV CHARGING PORTFOLIOS



MANAGED CHARGING

Enhancing grid efficiency & stability



COMMUNITY CHARGING

Increasing public access to EV infrastructure



COMMERCIAL CHARGING

Enabling businesses to electrify their fleets

Policy







HOME CHARGING INCENTIVE

Managed Charging Portfolio

A passive managed charging program encouraging customers to charge 90% off-peak annually

VEHICLE CHARGING TIME OF USE (TOU)

An on-peak/off-peak rate only applied to when a customer charges their EV

SMART CHARGE MANAGEMENT

Active managed charging program prioritizing customer charging preference & grid signals

MULTIFAMILY MANAGED CHARGING

Off-peak charging incentive for customers in multifamily homes

FLEET MANAGED CHARGING

Charge management software (CMS) enabling fleets to interconnect quickly by limiting charging load

STATE

AUIDENCE

CHALLENGE

PROGRAM STRUTURE

Discontinue Dec 2024

Residential EV drivers who may not be eligible for the Vehicle Charging TOU rate.

Some EV owners can't

participate in the EV TOU

rate but still want to take

advantage of savings by

charging during off-peak

annual \$50 gift card for

off-peak (9pm-7am) year-

Customers can participate

through vehicle telematics

or Level 2 smart charging.

charging their vehicle >90%

· Customers receive an

times.

round.

rate because of their electric

Approved

2023 Phase 2 Proposal

- Residential EV drivers enrolled in BGE's Schedule R rate who have a smart L2 charge and/or vehicle with onboard telematics.
- As more EV drivers charge on BGE's system, it increases peak demand for electricity.
- By encouraged greater shift to off-peak times, BGE can ensure more reliable power for all customers.
- Customers can stay on schedule R rate and EV charging is placed on TOU rate.
- Participation is through vehicle telematics or Level 2 smart charging.
- Their credit appears on their monthly bill based on the kWh used for charging each billing cycle.

Approved

2023 Phase 2 Proposal

- Residential EV drivers who drive Tesla vehicles and charge at home.
- As more EV charging is occurring at the same time, demand for electricity will increase and require more costly, faster upgrades if charging is left unmanaged.
- Customers allow BGE to manage EV charging load in exchange for \$10 monthly bill credit.
- Participation occurs through vehicle telematics of Level 2 smart charger.
- Managed charging spreads out EV charging load over a longer period, ensuring vehicle is still ready when needed.

New Program

Residential EV drivers without access to dedicated home charging.

- About 25% of MF customers lack dedicated charging solutions.
- Participation is limited in managed charging programs, creating inequities in savings opportunities.
- Enroll via vehicle telematics.
- Customers can charge throughout our service area.
- Earn a \$5 incentive for every 100 kWh up to \$20 a month.
- For discussion: \$5 monthly reward for charging >85% off-peak.

In Development

- Commercial fleet customers transitioning to electrification.
- Many commercial customers struggle with electrification due to insufficient site capacity for fleet charging, leading to project delays and frustration.
- Provide a list of CMS providers for fleet customers with capacity limits, who will set charger load limits accordingly.
- Allow customers to interconnect more quickly by limiting chargers to not exceed nameplate capacity.
- Provide incentive for setup fees and physical CMS device.

BGE EVsmart

Community Charging Portfolio









Empowering widespread EV adoption through utility ownership.

MULTIFAMILY UTILITY OWNED

Utility ownership for equitable athome EV charging.

CHARGER-AS-A-SERVICE (CaaS)

Flexible, subscription-based access to electric vehicle (EV) charging infrastructure.

PUBLIC MAKE-READY INCENTIVES

Make-ready incentives for commercial property owners to deploy EV charger installation.

Discontinue Dec 2025 Continue Operate and Maintain

· Commission chargers where

environmental justice (EJ)

likely to install.

communities.

• Strategically place in

the private market was less

 State owned properties in which there is publicly available parking.

Continue New Installation Continue Operate & Maintain 2023 Phase 2 Proposal

Property Managers of apartments, condominiums, and HOA boards.

In Development

Property Managers of apartments, condominiums, HOA boards, and Workplace.

• High upfront costs and

communities.

charger deployment in

Some communities need

to operate EV stations.

installing complexity hinder

additional financial support

New Program

2023 Phase 2 Proposal

- Commercial entities with publicly accessible parking, such as shopping centers, civic centers, garages, hotels, and other destination locations.
- High upfront costs for EV charging infrastructure can be a significant barrier.

CHALLENGE

• 372 chargers commissioned.

• 127 of chargers strategically placed EI communities, including 3 in Johnston Square and 12 planned at Coppin State University

- Operate up to a total of 475 public charging stations.
- Focused on enhancing charger reliability & transparency.

- High upfront costs and installing complexity hinder charger deployment in communities.
- Many communities lack the resources to own and operated EV stations
- 100 chargers currently approved.
- Additional 200 chargers to continue to offer this service to more communities with this challenge.
- The rebate covers 50% of the subscription fee, up to \$100 per port, with a minimum of four ports required per community over the five-year term.
- Disadvantage communities can receive a higher subscription rebate.
- Rebates will cover 75% of upgrades, up to \$30,000 per site.
- Disadvantage communities can receive a higher subscription rebate.

STATE

AUIDENCE

PROGRAM STRUTURE

BGE EVsmart

Commercial Charging Portfolio













COMMERCIAL **REBATES**

Rebates and incentives for installing charging stations at their property

FLEET EVSE INCENTIVES

Incentives for installing charging stations for business fleets

FLEET MAKE-READY INCENTIVES

Incentives for infrastructure upgrades to install chargers

FLEET **ASSESSMENTS**

Evaluation of fleet electrification needs, metrics, and infrastructure

STATE

AUIDENCE

CHALLENGE

PROGRAM STRUTURE

Discontinue Dec 2024

Multifamily, small business or non-profit workplace.

High upfront costs and installing complexity hinder charger deployment.

- Rebate for 50% of the cost of eligible EV charging equipment and installation:
- Up to \$5,000 per port for L2 EV chargers
- Up to \$15,000 per DCFC station for
- · Maximum incentive of \$30,000 per site.

New Program

2023 Phase 2 Proposal

- All vehicle fleets, including commercial, non-profit, educational institutions, transit agencies, and other operators, excluding private individuals.
- Fleets face internal and external mandates to electrify.
- High upfront costs and installing complexity hinder charger deployment.
- Incentives of 50% of project cost up to:
- L2AC: \$5k / port
- L3DC: \$15k / port
- \$30k max / location (limit 2)
- Disadvantage communities can receive a higher subscription rebate.

New Program

2023 Phase 2 Proposal

- All vehicle fleets, including commercial, non-profit, educational institutions. transit agencies, and other operators, excluding private individuals.
- Fleets face internal and external mandates to electrify.
- High upfront costs and installing complexity hinder charger deployment.
- Tiers for Light Duty (LD) and Medium/Heavy Duty (MHD) vehicles:
 - LD → 90% project cost up to \$15k
 - MHD → 75% project cost up to \$100K
- Disadvantage communities can receive a higher subscription rebate.

Part One Approved Part Two In Development

- All vehicle fleets, including commercial, non-profit, educational institutions, transit agencies, and other operators, excluding private individuals.
- Fleet operators feel pressure to electrify from various sources but often lack a clear starting point.
- Electrification efforts are delated without fleet & grid assessments.
- Part 1: Focused on fleet needs: vehicle choice. charger options, total cost of ownership and CO2 impact analysis.
- Part 2: Conducting site evaluation to install necessary equipment, including providing support for completing utility service application.

