



**MARYLAND**  
**ZERO EMISSION**  
**Electric Vehicle Infrastructure Council**

July 29, 2021

# Agenda

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- Welcome and Announcements
- Public Comments
- Communications Working Group Update
- Legislative Working Group Update
- PSC EV Working Group Update
- Utility Updates
- State Agency Updates
- Closing Remarks



# Welcome and Announcements

Deputy Secretary Lewis, MDOT

# New ZEEVIC Member

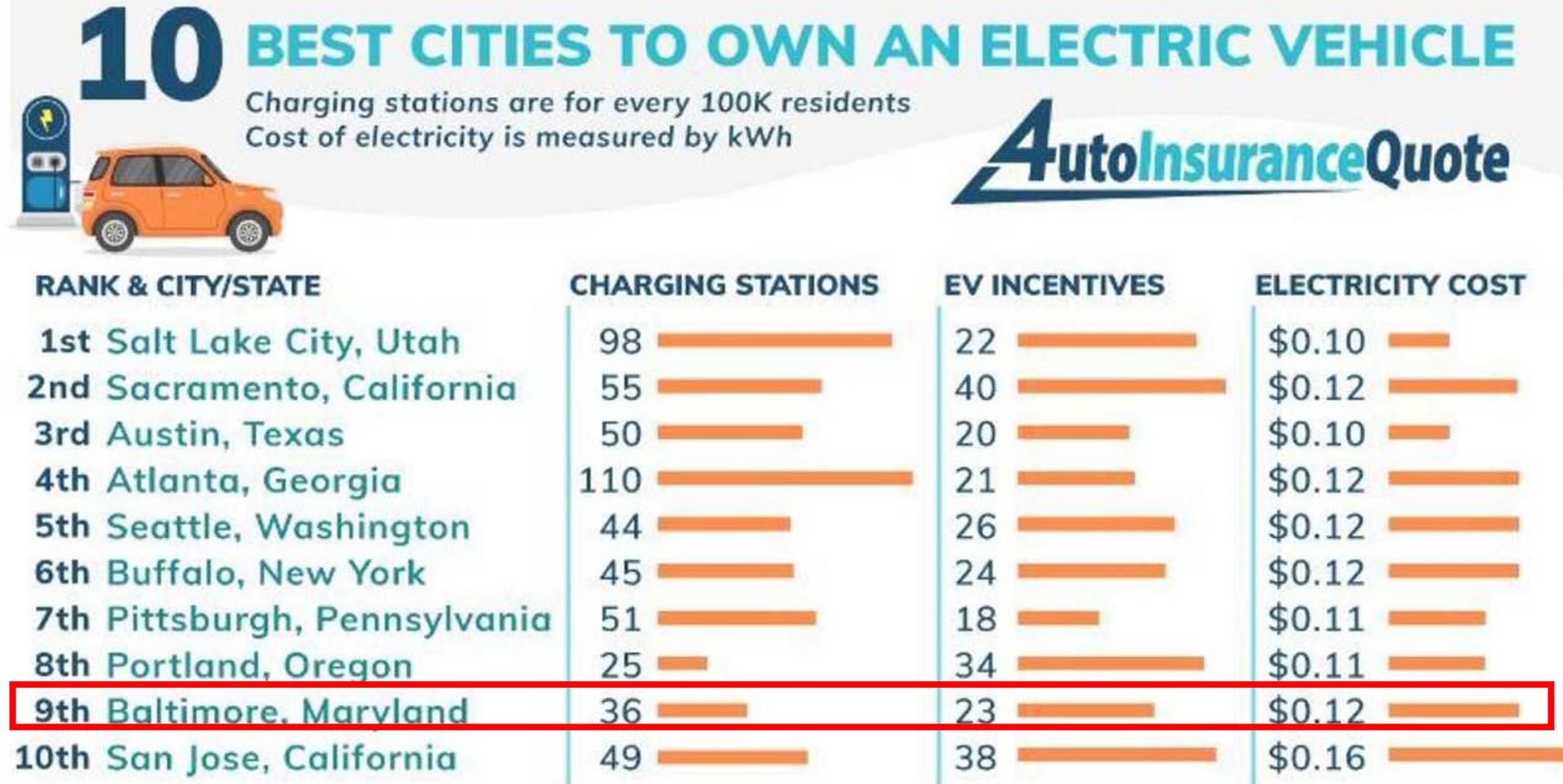
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Delegate Tony Bridges  
(District 41-Baltimore City)

# Announcements

AutoInsuranceQuote.com ranked Baltimore as one of the top 10 cities to own an EV!



# Announcements

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Prince George's County received \$5.15 million for electric buses and charging station through the FY21 Low and No Emission Grant Program

JUNE 28, 2021

## PRINCE GEORGE'S COUNTY DELEGATION MEMBERS ANNOUNCE MORE THAN \$5 MILLION FOR ELECTRIC BUSES

Today, U.S. Senators Chris Van Hollen and Ben Cardin, and Congressman Steny H. Hoyer, and Anthony Brown (all D-Md.) announced \$5,150,000 in federal funding to purchase electric buses and charging stations, replacing existing diesel buses, in Prince George's County.

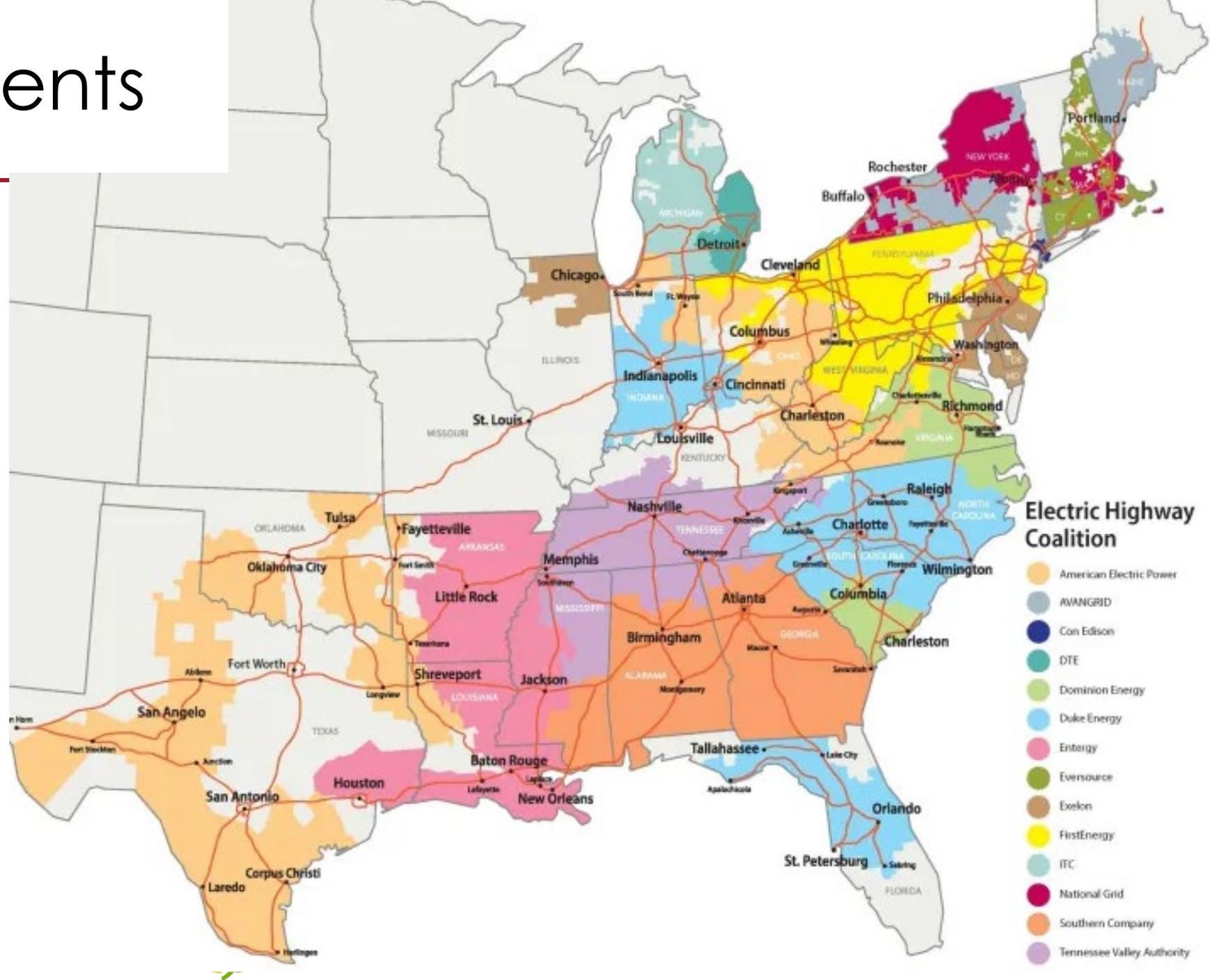
"Communities of color are more susceptible to environmental injustices and the harmful effects of climate change, such as poor air quality. That is why this new round of federal funding to purchase electric buses is not only a focused investment in our public transportation infrastructure, but a smart investment in the health and safety of future generations as we work to combat and mitigate the effects of climate change," **said the lawmakers.** "We look forward to supporting even more important work to reduce emissions from transportation while keeping our communities healthy through upcoming infrastructure legislation."

Funding comes from the Federal Transit Administration as a part of the FY21 Low and No Emission Vehicle Grant Program. The goal of the Low and No Emission Vehicle Program is to assist transit agencies in their shift to cleaner technologies, supporting the



# Announcements

Exelon and First Energy joined the Electric Highway Coalition, connecting utilities in 29 states and DC to coordinate DC Fast Charging network growth and eliminate EV range anxiety



# Public Comments





# Communications Working Group Update

Carrie Giles, ICF

David Proctor, Sharp & Company

# Maryland EV Website Analytics

June 1 – June 30, 2021

**Page Views:** 2,566

## **Audience Overview:**

Search Traffic: 52%

Referral Traffic: 15%

Direct Traffic: 35%

## **Top Referral Traffic:**

1. bge.com: 24%
2. pepco.com: 20%
3. Facebook.com: 13%
4. Firstenergycorp.com: 12%
5. Mdot.Maryland.gov: 7%
6. delmarva.com: 5%
7. Sharpco.maps.arcgis.com: 4%
8. Blog.feedspot.com: 2%
9. Evadc.org: 2%

## **Top Pages Visited:**

1. Incentives: 1,033 (40%)
2. Homepage: 802 (31%)
3. Charging: 313 (12%)
4. ev-101: 129 (5%)
5. hydrogen-101: 50 (2%)
6. local\_ev\_resources: 39 (2%)
7. news: 38 (1%)
8. resources/ev-calculators: 28 (1%)
9. charging/afdc-map: 21 (1%)

# Maryland EV Social Media Post Examples

 **Maryland Electric Vehicle**  
June 14 at 5:00 PM · 🌐

Want to help us promote EVs in Maryland? Share your EV Ownership Story by visiting:  
[tinyurl.com/marylandev](https://tinyurl.com/marylandev)



**SHARE YOUR  
EV OWNERSHIP STORY**

Help Maryland register 300,000 EVs by 2025!  
Share your story and a photo of your vehicle. Your testimonial that could be featured in an interactive educational module on our website.

**TINYURL.COM/MARYLANDEV**

 **Maryland Electric Vehicle**  
June 24 at 5:02 PM · 🌐

In partnership with the Maryland Energy Administration and Giant Food, Volta Charging has reached a milestone of 100 complimentary EV charging stations at prime locations across Maryland.

<https://voltacharging.com/.../volta-100-charging-stations-in.../>



**Giant**

# Maryland EV Social Media Post Examples

 **Maryland Electric Vehicle** June 7 at 5:00 PM · 🌐

BGE (MyBGE) has installed four new DC fast charging Stations at BWI Airport's cell phone lot (BWI Thurgood Marshall Airport (BWI)). The chargers can provide up to an 80% charge within 15 minutes.

Learn more at  
<https://airport-world.com/bwi-airport-unveils-new-electric.../>



 **Maryland Electric Vehicle** June 10 at 5:00 PM · 🌐

Montgomery County Public Schools is a national leader in upgrading its fleet of school buses with electric models.

Learn how this shift will improve children's health and strengthen communities while staying budget neutral.  
<https://www.popsci.com/science/electric-school-bus/>



# ZEEVIC StoryMap – Now Live!



Maryland EV Journey

## Types of EVs

EVs are low and zero emissions vehicles that are either fully or partially powered by electricity. If you're new to the world of EVs, these visuals will help you make sense of the three main types of vehicles available in Maryland.

HYBRID ELECTRIC VEHICLES (HEVs)

PLUG-IN HYBRID ELECTRIC VEHICLES (PHEVs)

BATTERY ELECTRIC VEHICLES (BEVs)

Regardless of your vehicle budget and needs, there is an EV for you.

[Learn more.](#)

## HEVs



HYBRID ELECTRIC VEHICLES

LOW EMISSIONS



FOSSIL FUEL DEPENDENT

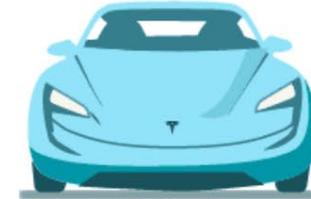
## PHEVs



PLUG-IN HYBRID ELECTRIC VEHICLES

LOW/ZERO EMISSIONS

## BEVs



BATTERY ELECTRIC VEHICLES

ZERO EMISSIONS



ELECTRIC DEPENDENT



# Legislative Working Group Update

Kevin Miller, ChargePoint

# 2021 Legislative Session Recap

Bill	Title	Notes
<a href="#">HB0110</a> ( <a href="#">SB0144</a> )	Electric Vehicle Recharging Equipment for Multifamily Units Act	Passed
<a href="#">HB0044</a>	Clean Cars Act of 2021	Passed
<a href="#">HB30</a>	Public Utilities – Office of Climate Counsel – Establishment (Climate Counsel Act)	Passed
<a href="#">HB0784</a>	Residential Construction - Electric Vehicle Charging	Passed
<a href="#">HB480</a>	Plug-In Electric Drive Vehicles – Reserved Parking Spaces	Failed
<a href="#">HB0832</a>	Public Utilities – Electric School Bus Pilot Program	Failed
<a href="#">SB0315</a>	Vehicle Laws - Plug-In Electric Drive Vehicles - Reserved Parking Spaces	Failed
<a href="#">SB0137</a> ( <a href="#">HB0334</a> )	Maryland Transit Administration – Conversion to Zero-Emission Buses (Zero-Emission Bus Transition Act)	Passed
<a href="#">SB0152</a>	Maryland Strategic Energy Investment Fund – Use of Funds and Electric Vehicle Excise Tax Credits	Failed
<a href="#">HB592</a>	State Vehicle Fleet - Conversion to Zero-Emission Electric Vehicles	Failed
<a href="#">HB1098</a>	Elected Officials – State-Owned Electric Vehicle Charging Stations – Reimbursement	Failed

# 2021 Legislative Session Recap

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- Condos and HOAs may not unreasonably restrict installation of EV recharging equipment (HB110/SB144)
- EV Recharging Equipment Rebate Program is funded at \$1.8M annually through FY2023 (HB44)
- Funding provided for backlog of vehicle tax credit applications received by MDOT MVA by 7/1/2020 (HB44)
- Representative of Office of People's Counsel appointed to ZEEVIC (HB30)
- Home builders and their agents must provide prospective home buyers the option to include EV charging or wiring, and rebate program information (HB 784)
- Beginning in FY2023, MTA transit bus purchases must be ZEVs (SB137)
- 25% of Passenger cars purchased for the State vehicle fleet in FY2022 must be ZEVs (FY2022 Budget Bill)



# PSC EV Working Group Update

Amanda Best, PSC

# Public Conference 44 (PC44) Update

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- **PC44 EV Work Group: Commercial Rate Design**

- Began efforts in 2020
- Collaboration underway to share data for the purposes of designing one or more rate options for review

- **PC44 EV WG Subgroup: EV Benefit/Cost Analysis**

- Began efforts January 2021
- Seven meetings to date
- Draft proposal under consideration
- Final report due December 2021

- **PC44 Distribution System Planning Work Group/Case No. 9665**

- Order issued June 23, 2021, establishing new work group and case
- Review existing processes, stakeholder involvement, and ways to potentially improve/unify where possible



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# Utility EV Programs – Design Sessions

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- **Scheduled Sessions**
  - Overview – May 13<sup>th</sup>
  - Residential/Education and Outreach – June 10<sup>th</sup>
  - Multifamily/Public – June 24<sup>th</sup>
  - Fleet – July 9<sup>th</sup>
  - DOE Projects/Workplace – July 22<sup>nd</sup>
  - **Final Review Session – August 12<sup>th</sup>**
  
- A draft proposal document is available for comments on Google Doc
  - Reach out to Kristy Fleischmann Groncki ([Kristy.Fleischmann@bge.com](mailto:Kristy.Fleischmann@bge.com)) or Amanda Best ([amanda.best@maryland.gov](mailto:amanda.best@maryland.gov)) for access
  
- A survey was sent out to gauge support on the various proposals.
  - One response per organization
  - Survey closes on August 6<sup>th</sup>
  - Reach out to Kristy Fleischmann Groncki ([Kristy.Fleischmann@bge.com](mailto:Kristy.Fleischmann@bge.com)) if you did not receive the survey
  
- Mid Course review due on September 15<sup>th</sup>
  - One EM&V report will be filed for all Utilities
  - Utilities to file semi-annual and mid-course review in one report per utility



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# Residential Program Proposals

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1. Increase customer education and outreach budget for each utility from 5% to 10%
2. Increase rebate by an additional 2,500 for BGE
3. Provide ongoing \$50 annual credits for staying enrolled for data access
4. Provide additional incentives for Limited Income customers (Up to \$1,000 rebate)
5. PHI proposes to revise the Residential Plug-in Vehicle TOU program to use the data from EVs and EVSE instead of a second AMI meter
6. Potomac Edison researching the costs to implement on-bill EV TOU rate (prefers off-bill credit)



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# Multifamily Program Proposals

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1. Install an additional 100 BGE-owned chargers and Potomac Edison to install 12 chargers
2. Expand rebate to include commercial locations within 1 miles of 100 Multifamily residents
3. Provide a make-ready program covering 100% of the utility side and 0% of the customer side
4. Provide 1 EV and charger for carsharing at 15 Multifamily residences for Limited Income customers



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# Public Program Proposals

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1. Increase budget to allow for a 60:40 split of L2 and DCFC
2. Purchase 150kW DCFC instead of 50kW
3. Provide a make-ready program covering 100% of the utility side and 0% of the customer side
4. SMECO would like to allow L2 chargers installed on gated government properties



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# Fleet Program Proposals

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1. Convene an EV Work Group to further develop Fleet EV Programs
2. Provide a Fleet calculator tool on BGE website
3. Provide 100 technical assessments for fleet customers
4. Provide rebates and/or make ready incentives for Fleet customers



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# Workplace Program Proposals

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1. Provide a make-ready program covering 100% of the utility side and 0% of the customer side
2. Provide technical assessments for 100 workplace customers
3. Provide rebates for 50% of the charger and installation up to \$5,000 per L2 port.

# Utility EV Program Design – Multifamily Charging Paul Verchinsky Recommendations (June 24 Recap)

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1. ONE L2 EVSE (DOUBLE PLUG) FOR EACH HOA AND APARTMENT COMPLEX IN MARYLAND INSTALLED AND MAINTAINED BY UTILITY (14,000 ESTIMATED)
2. UTILITY SURVEYS AND INCLUDES ANY UTILITY UPGRADE NEEDED TO THE HOA/APARTMENT FOR THE FIRST L2
3. UTILITY SURVEYS AND PROVIDES A COST ESTIMATE OF NEW/UPGRADED DISTRIBUTION LINES/TRANSFORMERS AND IMPACT ON DISTRIBUTION GRID TO THE PSC FOR FUTURE L2S AT EACH HOA/APARTMENT COMPLEX.
4. UTILITIES BUILD OUT THE DISTRIBUTION SYSTEM TO FUTURE L2S

# HOAS AND APARTMENT STATISTICS

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- 33% OF RENTERS IN MD (ABOUT 2 MILLION OUT OF 6 MILLION) LIVE IN APARTMENT COMPLEXES
- 52.5% RENT IN BALTIMORE CITY AND LIVE IN APARTMENT COMPLEXES
- MOST RENTERS FALL INTO THE LOW AND MODERATE INCOME CATEGORY
- 6,785 HOAS ESTIMATED IN MD (2019 CAI)
- 7,000 ESTIMATED APARTMENT COMPLEXES (22,587 BUILDINGS, MDP)

# DECISION VARIABLES AT HOAS

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- BOARD MEMBERS LACK OF KNOWLEDGE AND INTEREST
- LACK OF ADEQUATE POWER TO THE HOA FOR L2 INSTALLATIONS
- COMMON AREA PARKING LOTS – NO ASSIGNED/OWNED SPACES
- COMMON AREA PARKING LOTS – OWNED PARKING SPACES
- COMMON AREA LIABILITY INSURANCE INCREASES
- EXISTING SERVICE AT INDIVIDUAL UNITS OR CENTRAL
- ELECTRICAL INSPECTION/PERMITS BY COUNTY/CITY
- RESIDENTIAL ARCHITECTURAL APPROVAL (DIFFERENT EVSE TYPES)

# HOAS – CONTINUED

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- COST OF EVSE BY HOA OR INDIVIDUAL OWNER
- EVSE REMOVAL WHEN OWNER MOVES
- ELECTRICAL SERVICE UPGRADES NEEDED AS MORE EVSES ARE ADDED
- WIFI EXTENSION/CELLULAR FOR APP USE IN SCHEDULING
- ANNUAL MAINTENANCE COSTS AND EVENTUAL REPLACEMENT COST
- OLDER HOAS WITH NO EXCESS POWER CAPACITY

# Utility Updates



# Utility EVSE Program Metrics

Through June 30, 2021

	Residential Rebates	Multifamily Rebates	Public EVSE	EV TOU Rate Program
BGE	1,164 applicants	21 applicants; 40 BGE-owned EVSE	128 EVSE energized; 210 EVSE total in-progress	407 participants
PHI	328 applicants	16 applicants; 6 sites approved, 3 EVSE energized	41 EVSE energized; >130 EVSE in process	11 participants
Potomac Edison	101 applicants	0 applicants	20 EVSE; 16 Level 2, 4 DC Fast	125 participants
SMECO			8 EVSE live; 16 in-progress	

# BGE

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- Draft Report Timeline & Requested Feedback
  - A draft of the proposals is posted on Google Docs for stakeholder feedback.
    - **Deadline** to provide feedback: **August 6<sup>th</sup>**
  - A survey will be sent out to gauge support of the proposals. **Due: August 6<sup>th</sup>**
  - A final review of the proposals will occur at the PSC EV Program Design session on August 12<sup>th</sup>
  - Depending on the results of the final review sessions on August 12<sup>th</sup>, BGE may give the stakeholders one more week for feedback.
    - **Closing all feedback on August 20<sup>th</sup>**
- Events
  - BGE is a sponsor at the Annapolis Drive Electric Week event on September 26<sup>th</sup>
  - BGE is participating in the Maryland Zoo's Trucks for Tots event on October 10<sup>th</sup>

# Potomac Edison

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- Draft Report Timeline & Requested Feedback
  - The PC44 work group reviewed possible utility program changes; a summary of those changes will be available from the PC44 work group on August 12<sup>th</sup>
- Events
  - Potomac Edison has no in-person events planned but is presenting an “[Electric Vehicle Charging Webinar](#)” to Maryland Multi-Housing Association members on August 11<sup>th</sup>

# PHI

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- Draft Report Timeline & Requested Feedback
  - PHI plans follow the same timeline as BGE. Draft report is expected in the 1<sup>st</sup> week of September but will double check with the team.
  - Please note any requests for specific input, feedback, or information from ZEEVIC members that would help with writing the reports.
- Events
  - [Residential EV Charger rebate](#) - Support For Tesla Customers!
    - Launched July 06, 2021
    - Several customers already in the application and approval process
  - Off-Peak / Off-Bill Rebate Program approved
    - PSC approved on May 26, 2021
    - PHI is launching program August 2021
    - 250 Pepco MD customers, 75 DPL
  - Plug-In Electric Vehicle Rate launching August 2021
    - Delayed due to contractor training and COVID-19
    - Requires second meter and supporting electrical upgrade

# SMECO

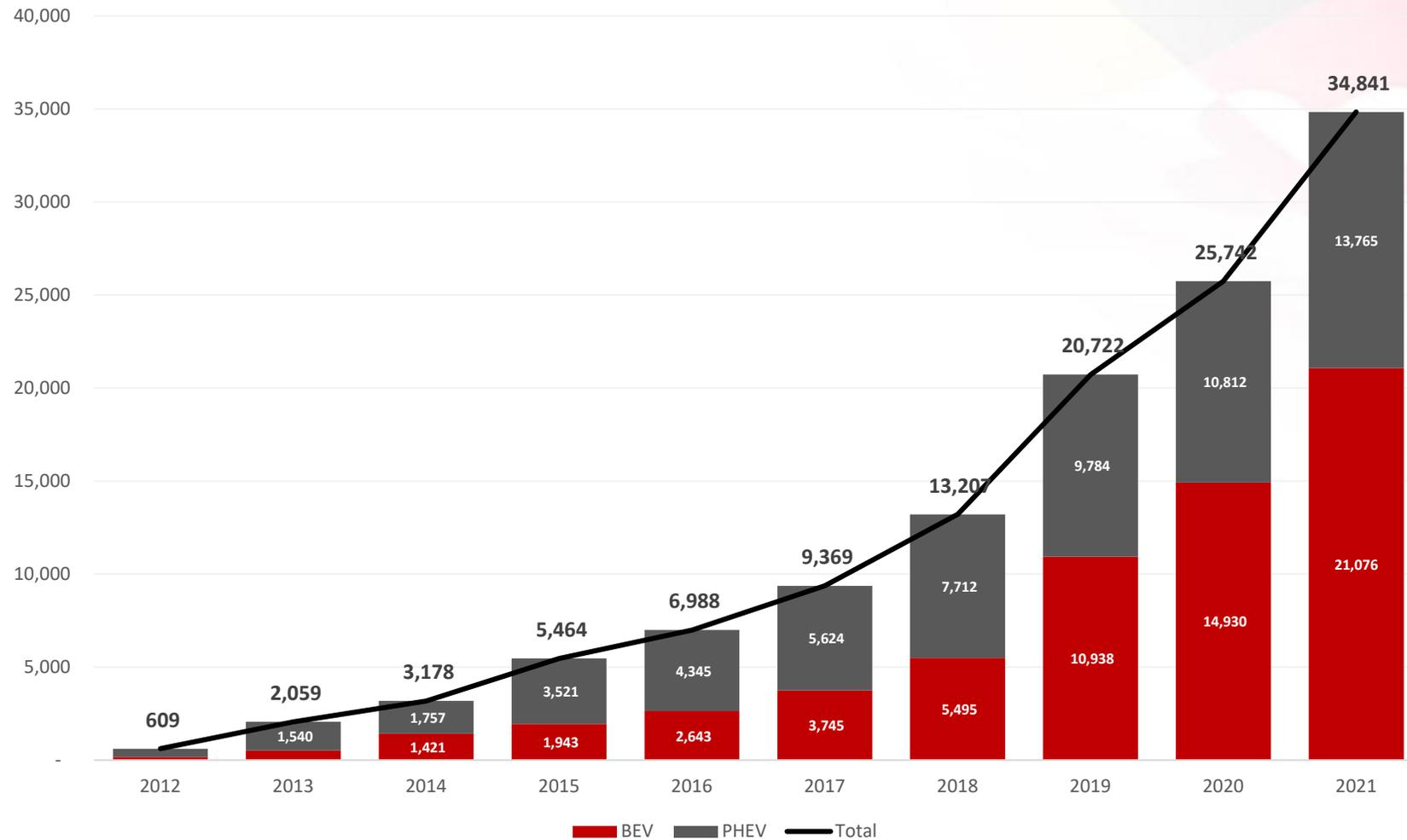
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- Events
  - PAST:
    - Ribbon cutting celebrations at the first EVSE installed in St. Mary's County (Leonardtown Library)
    - Ribbon cutting celebration at the first EVSE installed in Charles County (Laurel Springs Park)
  - FUTURE:
    - Potential ribbon cutting celebration for new EVSE in Calvert County.
    - Plan an event around National Drive Electric Week in late September/early October. On hold due to COVID-19 concerns.



# State Agency Updates

# MDOT - EV Registrations (Fiscal Year)



# Federal Funding Opportunities

Federal Funding is Available for Electric Vehicle Charging Infrastructure on the National Highway System  
 FHWA Report –April 22, 2021

## LEGEND

		
Construction and installation of EV charging infrastructure including parking facilities and utilities.	Workforce development and training related to EV infrastructure.	EV acquisitions and engine conversions - cars or trucks.

		
Planning for EV charging infrastructure and related projects.	Construction and installation of EV charging infrastructure to support operational, resiliency, national energy security, environmental, and community goals for freight transportation.	Installation of EV charging infrastructure as part of transit capital projects eligible under chapter 53 of title 49, United States Code.

	FY 2021 AMOUNT						
<b>FORMULA PROGRAMS</b>							
National Highway Performance Program (NHPP)	\$23.1 B						
Surface Transportation Block Grant Program (STBG)	\$10.2 B						
Congestion Mitigation & Air Quality Improvement Program (CMAQ)	\$2.4 B						
National Highway Freight Program (NHFP)	\$1.5 B						
State Planning and Research (SPR)	\$641.5 M						
Metropolitan Planning (PL)	\$357.9 M						
<b>DISCRETIONARY PROGRAMS</b>							
Rebuilding American Infrastructure with Sustainability and Equity (RAISE) (formerly known as BUILD)	\$1.0 B						
Infrastructure for Rebuilding America (INFRA) Grant Program	\$889.0 M						
Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)	\$53.3 M						
<b>OTHER ALLOCATED PROGRAMS</b>							
Federal Lands and Tribal Transportation Program (FLTTP)	\$1.0 B						
Highway Infrastructure Program (HIP) (other than for bridges)	\$644.0 M						
Puerto Rico Highway Program (PRHP)	\$74.9 M						
Territorial Highway Program (THP)	\$37.3 M						
<b>INNOVATIVE FINANCE PROGRAMS</b>							
State Infrastructure Banks (SIBs)	Varies						
Transportation Infrastructure Financing and Innovation Act (TIFIA)	Varies						



# MDE Program Updates

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## Volkswagen Settlement Updates

- EVSE Program
  - \$3.7 million in available funds
  - 56 Proposals received with total funds requested of \$11.36 million
  - All awardees have been notified
  - Contracts to be finalized and signed in August
- Charge Ahead Grant Program – for Level 2 EVSE
  - A total of 24 sites were awarded chargers
  - These 24 sites will provide a total of 145 Level 2 charging ports
  - Funds spent approx. \$650,000
- Electric Corridor Grant Program – for DCFC EVSE
  - A total of 13 sites were awarded
  - These 13 sites will provide 36 Level 3 charging ports
  - Funds spent approx. \$3,040,000

# MEA Program Updates

- FY21: MEA processed \$1.8M worth of rebates, totaling 1,880 chargers
  - \$890,484 for 1,580 residential EVSE
  - \$909,486 for 300 commercial EVSE
  - Co-released [Volta Charging press release](#) in mid-June- 64 chargers at 22 locations supported by program.
- FY22: launched on 7/1, \$1.8M budget
  - Commercial award cap dropped from 20% to 18% (\$324K, ~81 chargers at max rebate, was 90 under FY21).
  - For charger and install applications, install expenses must be less than 6 months old. The equipment expenses are no longer required to also be less than 6 months old from the date of application receipt.



# MEA Program Updates

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- Clean Fuels Incentive Program (CFIP)
  - FY21- 2 MHD ZEV projects (MoCo electric school buses, Peapod electric delivery vans)
  - EVgo chargers already completed (Bethesda Row, Pike & Rose).
  - FY22 program still in development, launch by mid-September.
  - Program budget expected up to \$1M.
  - Considering solely focusing on fleet vehicles, potentially increasing MHD ZEV incentive caps.
  - Feedback welcomed, share by 8/12.

# MEA Program Updates

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- Clean Fuels Technical Assistance Program Update
  - First 4 reports complete and online, 3 were electric-focused- Cumberland, Laurel, Rockville
  - 5th report for Anne Arundel County ongoing, expected to be completed within the next few weeks.
  - Collecting feedback from participants, response largely positive.
    - May need to allow participants more time and/or opportunities to provide feedback on process/report/results etc.
  - Full program evaluation by fall, potentially reopen next application round by the end of the year.

# Additional State Agencies

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- MDP
- Commerce
- DGS

# Closing Remarks – Deputy Secretary Lewis

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- Next Meeting September 15, 2021