



MARYLAND ZERO EMISSION

Electric Vehicle Infrastructure Council

January 20, 2021

Agenda

- Welcome and Announcements
- Public Comments
- Legislative Discussion
- Communications Working Group Update
- State Agency Updates
- Montgomery County Updates
- Utility Updates
- Closing Remarks

Welcome and Announcements

Deputy Secretary Lewis, MDOT



Public Comments



Legislative Discussion

Kevin Miller, ChargePoint



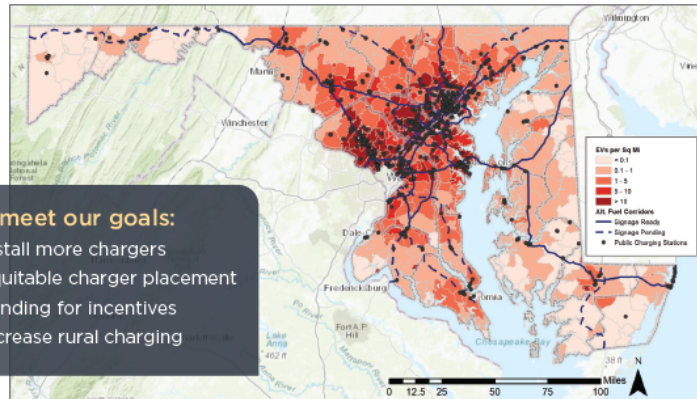
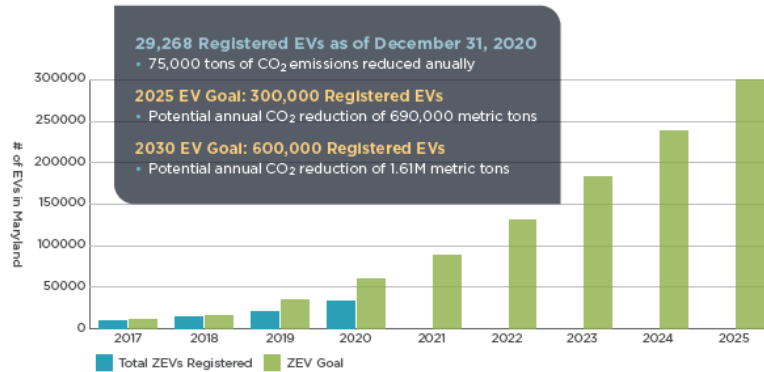
2021 Legislation

Bill	Title	Sponsor	Current Status	Next Meeting/Hearing/Update
HB0110 (SB0144)	Electric Vehicle Recharging Equipment for Multifamily Units Act	Delegate Korman	In the House	1/26/2021
SB0144 (HB0110)	Electric Vehicle Recharging Equipment for Multifamily Units Act	Senator Guzzone	In the Senate	1/28/2021
SB0152	Maryland Strategic Energy Investment Fund – Use of Funds and Electric Vehicle Excise Tax Credits	Finance Committee Chair	In the Senate	1/19/2021
SB0315	Vehicle Laws - Plug-In Electric Drive Vehicles - Reserved Parking Spaces	Senator Young	In the Senate	1/27/2021
HB0044	Clean Cars Act of 2021	Delegate Fraser-Hidalgo	In the House	1/28/2021
HB480	Plug-In Electric Drive Vehicles – Reserved Parking Spaces	Delegate Barve	In the House	n/a

2021 Legislative Flyer



Zero Emission Vehicle (ZEV) Barriers in Maryland



tinyurl.com/ZEEVIC2021



marylandev.org



Zero Emission Vehicle (ZEV) Policy Solutions

Equitable ZEV Funding

Equitable incentive funding for electric vehicle and charging station purchases.

EV-Ready Building Codes

New construction to include electric vehicle (EV) charger-ready wiring in parking spaces.

Right to Charge Initiatives

All owners in multi-unit dwellings and HOA neighborhoods to install charging at their own cost, without prohibitions.

ZEV Parking Enforcement

Prevent non-EV parking in EV charging spaces as well as prevent EVs from parking in an EV charging space without actively charging.



tinyurl.com/ZEEVIC2021



marylandev.org

A stylized graphic in the top right corner shows two hands, one in red and one in white, holding a globe. The globe is composed of yellow, grey, and red segments. The hands are rendered in a simple, modern style with white outlines and flat colors.

Communications Working Group Update

Colleen Turner, MDOT

Maryland EV Website Analytics

December 1 – December 31, 2020

Page Views: 1,812

Audience Overview:

Search Traffic: 56%

Referral Traffic: 15%

Direct Traffic: 33%

Top Referral Traffic:

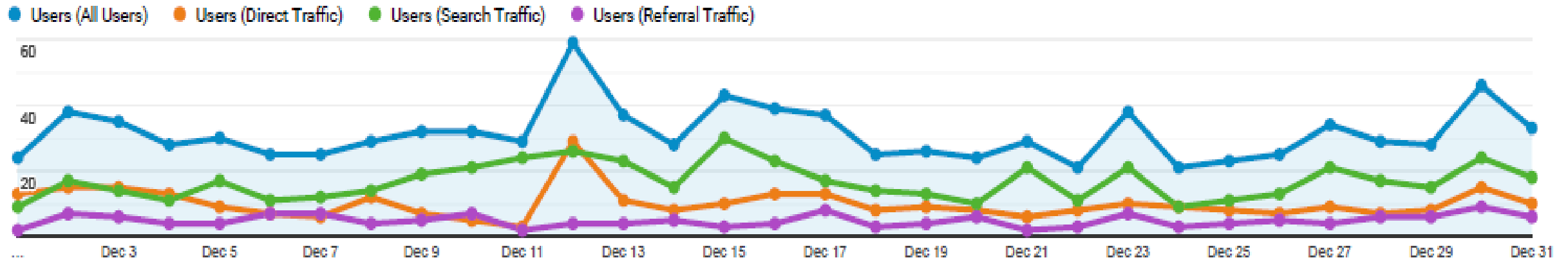
1. pepco.com: 36%
2. bge.com: 36%
3. delmarva.com: 6%
4. firstenergycorp.com: 6%
5. facebook.com: 3%
6. mdot.maryland.gov: 3%
7. evadc.org: 2%

Top Pages Visited:

1. Incentives: 804 (44%)
2. Homepage: 508 (28%)
3. Charging: 207 (11%)
4. ev-101: 89 (6%)
5. hydrogen-101: 51 (3%)
6. resources: 29 (2%)
7. resources/useful-links: 24 (1%)
8. charging/afdc-map: 23 (1%)
9. resources/ev-calculators: 19 (1%)

Maryland EV Website Analytics

December 1 – December 31, 2020



Maryland EV Social Media Analytics

Earned Highlights:

- Total Posts in December: 12
- Post Engagements: 23
- Post Reach: 232

Maryland EV Social Media Post Examples

Maryland Electric Vehicle
Published by Crowdfire [?] · December 17, 2020 at 5:00 PM · 🌐

The Ocean City Council has approved credit card use at current and upcoming Level 3 charging stations. Users will no longer be required to go through the city's ParkMobile app. To see Ocean City charger locations, visit <https://oceancitymd.gov/.../electric-vehicle-charging-statio.../>
#EV #MarylandEV #EVCharging



69 People Reached 10 Engagements [Boost Post](#)

Maryland Electric Vehicle
Published by Crowdfire [?] · December 14, 2020 · 🌐


The Ocean City Council approved a request from the Electric Vehicle Institute to install four new Level 3 charging stations.
https://www.oceancitytoday.com/.../article_3ef15506-3598-11eb...
#EV #MarylandEV #EVCharging



71 People Reached 9 Engagements [Boost Post](#)

Maryland Electric Vehicle
Published by Crowdfire [?] · December 7, 2020 · 🌐

The state of Maryland continues to limit exposure of Greenhouse gases through the Clean Cars Program, requiring a percentage of vehicles sold each year to meet ZEV (Zero Emissions Vehicle) standards.
Learn more at <https://mde.maryland.gov/.../MobileSourc.../Pages/CleanCars.aspx>
#EV #MarylandEV #ClimateChangeMaryland



53 People Reached 3 Engagements [Boost Post](#)

Maryland Electric Vehicle
Published by Crowdfire [?] · December 10, 2020 · 🌐

According to a recent report published by Union of Concerned Scientists, first year savings from fuel and maintenance costs by driving an electric vehicle (EV) are estimated to be over \$700 annually. Savings are particularly good for rural Maryland drivers - switching to an EV could save up to \$1,311 for a full-size car and \$2,018 for a full-size pickup.

Read the full report
<https://www.ucsusa.org/.../rural-transportation-opportunities.....>
See More

Maryland
First Year Fuel and Maintenance Cost Savings



Area	Mid-Size Car	Full-Size SUV	Full-Size Pickup
Urban	~\$800	~\$1,100	~\$1,300
Suburban	~\$700	~\$1,000	~\$1,200
Rural	~\$1,300	~\$1,700	~\$2,000

65 People Reached 5 Engagements [Boost Post](#)



State Agency Updates



Montgomery County Updates

Montgomery County Climate Action Plan

Building a Healthy, Equitable, & Resilient Community

OVERVIEW OF DRAFT PLAN & EV-RELATED ELEMENTS

MARYLAND ZEEVIC

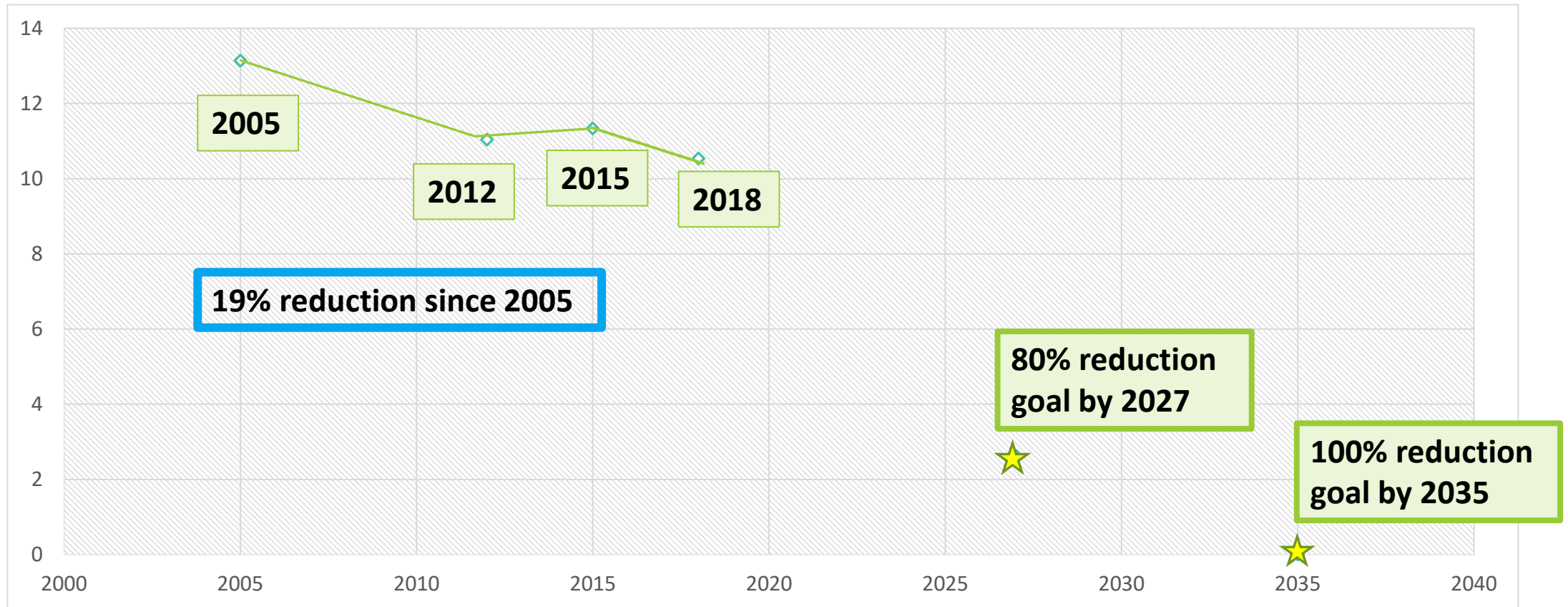
ZERO EMISSION ELECTRIC VEHICLE INFRASTRUCTURE COUNCIL

JANUARY 20, 2021



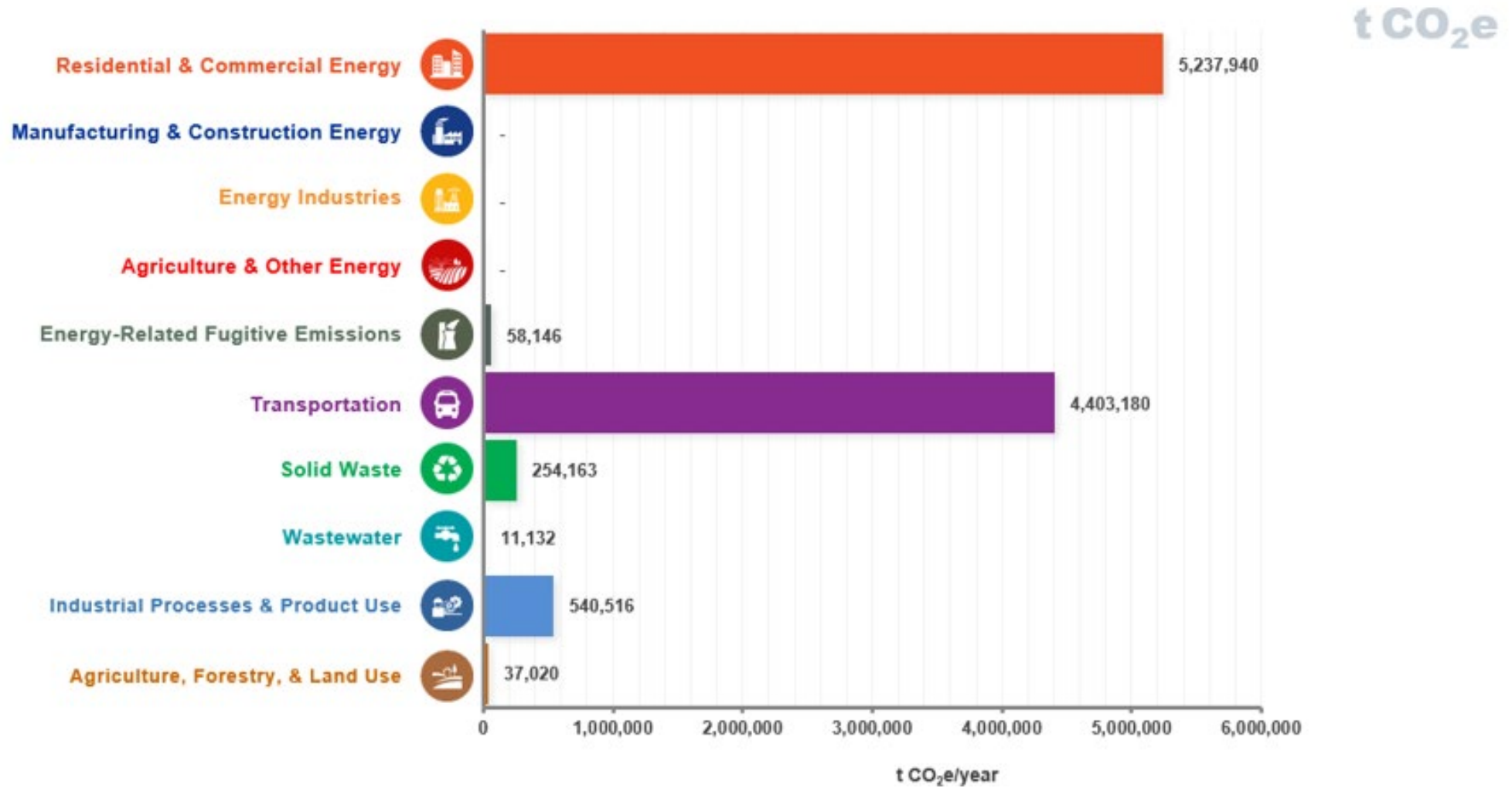
Montgomery County's Measured Greenhouse Gas Emissions

(million metric tons of CO₂e)



Source: Metropolitan Washington Council of Governments (MWCOG) Montgomery County GHG Inventory

2018 Base Year Community Emissions by Sector



Actions Included in the Draft Climate Action Plan

- **Nearly 90 prioritized actions** to put the County on the path to meet our 80% by 2027 and 100% by 2035 (Net Zero) emissions reduction goals and reduce climate risk.
- **51 Direct Actions in 5 Sectors:** Clean Energy, Buildings, Transportation, Adaptation, Sequestration
- **36 Indirect Actions in 2 Sectors:** Governance, Community Engagement
- **Equity enhancing measures and co-benefits** identified for implementing each action.
- **Draft “CAP”** released first week of December. Public review period underway.

Unique elements of this Plan

- **Zero GHG emissions by 2035 goal** – highly aggressive targets, requiring highly aggressive strategies
- **Community members helped develop nearly 900 recommendations** – representing a wide range of technical & demographic backgrounds
- **Racial equity and social justice lens** applied throughout the Plan
- **Virtual Information Room**



Major GHG Reduction Areas:

- Transition the electricity grid to clean energy
- Electrify and increase efficiency of building systems/end uses (new and existing buildings)
- Move away from natural gas
- Shift passenger vehicle use to transit/non-vehicular options
- Electrify public and private sector vehicles of all types
- Expand EV charging network
- Divert organic waste

Draft CAP Transportation Actions

Electrification-Related

- T-3** Private Vehicle Electrification Incentives/Disincentives
- T-5** Electrify Public Buses & School Buses
- T-6** Electrify County & Public Agencies Fleets
- T-7** Expand the EV Charging Network
- T-10** EV CarShare Program for Low- Income Communities
- T-11** Off-Road Vehicle Electrification

Transit, TDM & Other Actions

- T-1** Expand Public Transit
- T-2** Expand Active Transportation & Shared Micromobility Network
- T-4** Congestion Pricing & Limiting Cars in Urban Areas
- T-8** Transportation Demand Management & Telework Strategies
- T-9** Traffic Management Systems
- T-12** Advocate for a Vehicle Carbon Gas Tax
- T-13** Advocate for Rail Alternative Fuels

Montgomery County EV Support Actions

EV Buying Coop/Group Buy

➤ Context

- **County adoption of Emergency Climate Mobilization Resolution:**
 - 80% reduction in GHG emissions by 2027
 - 100% elimination of GHG emissions by 2035
 - Transportation sources represent 42% of County's GHG emissions
- **Draft Climate Action Plan** based on recommendations of Technical Work Groups, studies and modeling
- **Acting while we plan:** Promoting adoption of EVs – Per Action T-3: Private Vehicle Electrification

➤ **Request for Information (RFI) for EV Group Buy Program** – Issued November 2020

- Appropriate scope, duration, program parameters
- Options for administering – working with lead organization outside County government
- Identify key stakeholders & their roles; how address equity
- Best marketing/promo strategies

➤ **EV Group Buy Forum** – Virtual discussion held w/ RFI respondents & others with information to share

Montgomery County EV Support Actions

EV Charging Stations – Resources

➤ Development Approval Process

- Traffic Mitigation Agreements (TMAGs)
- Transportation Demand Management (TDM) Plans

➤ Zoning Ordinance Provisions

- Requires EV-ready spaces for all parking facilities with 100+ spaces

➤ EV Charging in County Parking Facilities

- 20 dual ports & growing

➤ EV Permitting Process for Residential EV Charging Installation

- EV Charging in Public ROW – Maricela Cordova, MCDOT & Atiq Panjshiri, Dept. of Permitting Services

➤ Utility Company EV Charging Stations on public property

Montgomery County EV Support Actions

Additional Actions

- Fleet purchases for motor pool vehicles
- EV Charging Stations for County vehicles
- Ride On Electric Buses – 1st 4 are operational; 10 on order
- Developing plans to transition to all EV bus fleet
- Ride On Bus Depot EV Bus Charging Installation
- Capital Bikeshare E-bike program
- Multi-vendor E-scooter and E-bike pilot program

Other CAP Components

- **Climate Vulnerability Assessment**
 - Identifies the County's four largest and growing climate hazards: extreme heat, extreme precipitation, high winds, and drought.
- **Climate Governance Actions**
 - Including resource implications, financing strategies
- **Community Engagement, Partnerships & Education Actions**
- **Racial Equity and Social Justice – Key Consideration Throughout the Plan**
 - Setting the historical and demographic context
- **Personal actions**

Companion Study Planned:

- **Sustainable Economic Development Report**

Next Steps – CAP & EV Group Buy:

- **Public Review of CAP:** Draft CAP open for public review until the end of February
- **Outreach:** Briefings and Q&A sessions with a wide variety of organizations
- **Virtual Information Room:** Launched interactive, online platform to host the CAP
 - Encouraging the public to learn more about the CAP through this fun, engaging approach
- **Survey:** Available on the website & in the Virtual Information Room
- **Timeline:** We anticipate issuing the final CAP in Spring 2021.
- **Actions:** EV Group Buy Effort in FY21; Other implementation actions also underway
- **Links:** www.montgomerycountymd.gov/climate
 - [Draft Climate Action Plan](#)
 - [Join Us at the Draft Climate Action Plan Virtual Information Room](#)

Contact Info:

Contact Information:

Montgomery County Commuter Services

Department of Transportation

Office of Transportation Policy

101 Monroe Street –10th Floor

Rockville, MD 20850

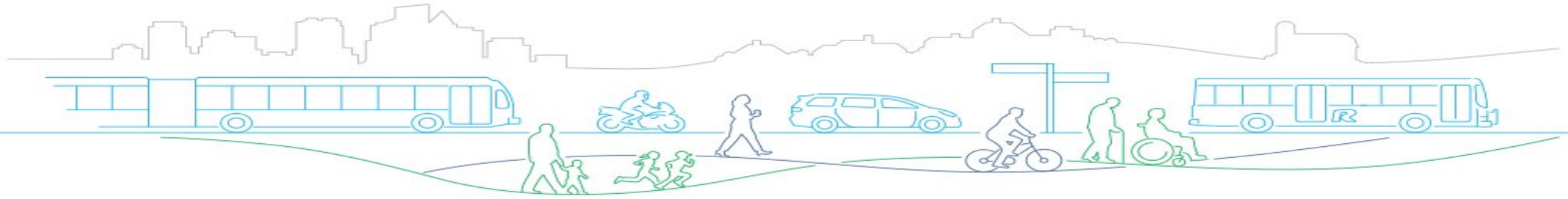
www.montgomerycountymd.gov/commute

Sandra L. Brecher, Chief

Commuter Services Section

(240) 777-8383

Sandra.Brecher@montgomerycountymd.gov



Residential Electric Vehicles (EV) Charging Permitting Guidelines

Montgomery County
Department of Transportation
Department of Permitting Services



New County Residential EV Charging Policy Objectives

County policy priority:

- Present options for **SAFE** home charging – Montgomery County's commitment to Vision Zero



New County Residential EV Charging Policy Objectives

New County policy:

- Provides for convenient, economical refuel of EVs
 - Ensures Right-of-Way serves the general Public
 - Focuses on single family or duplex property owners
 - Allows for residential EV charging within private property or curbside
 - Maintains parking availability and restrictions
- ❖ Curbside EV charging applies only when charging is not possible and cannot be accommodated within private property



New County Residential EV Charging Policy Objectives

To address these needs, Montgomery County:

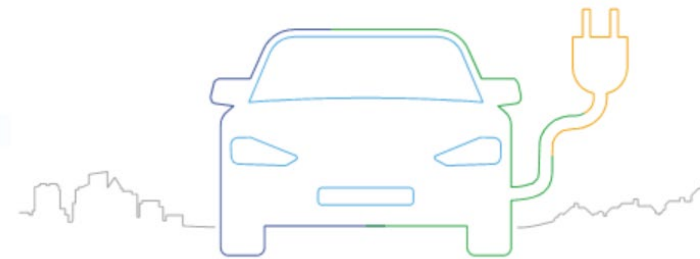
- Started the implementation of a two-year EV Charging Station Pilot Program on September 2, 2020.
- Once this evaluation period has expired, and depending on the success of the program, DPS will either adopt the policy or deem it no longer valid.
- If not adopted, any equipment installed in the public right of way must be removed and the right of way restored to its original condition at the property owner's expense.
- These Guidelines can be found at:

https://www.montgomerycountymd.gov/DPS/Resources/Files/RCI/EV_Charging_Guidelines.pdf

PILOT PROGRAM

Residential Electric Vehicles (EV) Charging Permitting Guidelines

An EV Charging Station Pilot Program will be implemented for a two-year period starting September 2, 2020. Once this evaluation period has expired, and depending on the success of the program, DPS will either adopt the policy or deem it no longer valid. If not adopted, any equipment installed in the public right of way must be removed and the right of way restored to its original condition at the property owner's expense.



MONTGOMERY COUNTY



Montgomery County
Department of Transportation



Montgomery County
Department of Permitting Services

SEPTEMBER 2020

New County Residential EV Charging Policy

How to apply for permit:

1. Submit letter of interest and site plan with proposed charging station location to DPS
2. DPS will review application and advise:
 - Review application to determine if charging within private property is possible
 - Provide direction to construct driveway or parking pad for charging station and parking space within private property, if possible
 - Provide direction to install curbside charging station in front of property within Right-of-Way, or,
 - Deny application if charging within Right-of-Way is not possible due to space availability and/or safety concerns

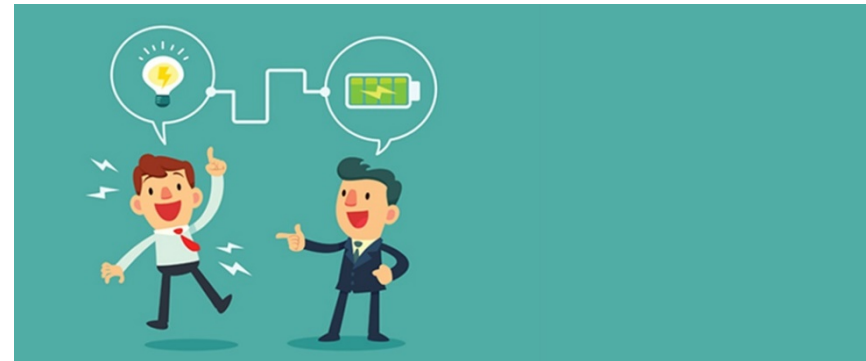


New County Residential EV Charging Policy

How to apply for permit:

Once DPS evaluates application and determines an EV charging station can be safely installed in the applicant's property, 1 of 3 options will apply:

- **Option A:** install EV charging station in existing driveway, garage or parking pad
- **Option B:** install EV charging station in new curb cut (driveway or parking pad) within private property
- **Option C:** install EV charging station within public Right-of-Way while parking electric car in public street



New County Residential EV Charging Policy

Safe Operation

- Operate in compliance with permits
- For curbside charging, be safe – minimize potential for hazards (retractable cord, enclosure, locked charging station, turn power off when not in use)
- Permit can be revoked if unsafe; repairs to restore Right-of-Way at Owner's cost
- Permit can be revoked if creating parking issues with neighbors; repairs to restore Right-of-Way at Owner's cost

Responsibilities

- Owner will pay all costs to purchase, install, use and maintain EV charging station and enclosure
- Maintain station in good and safe condition
- Owners do not have parking exclusive rights, privileges or priority



New County Residential EV Charging Policy

Permitting Cost -by Owner

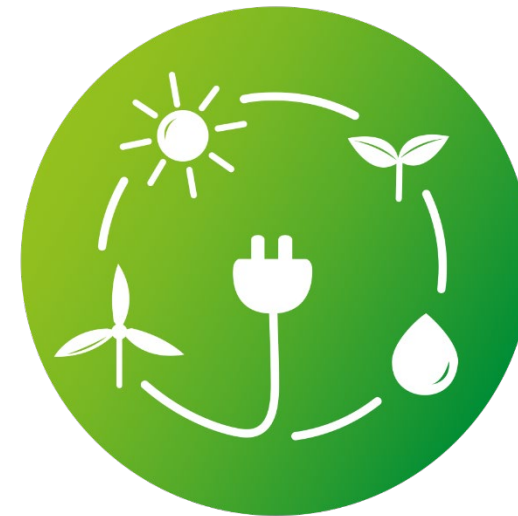
- Electrical Permit: \$150 - \$300 (depending on Amps needed)
- Right of Way Permit: \$235
- ❖ Permit fees include permit application evaluation, review, approval and inspection services



New County Residential EV Charging Policy

Summary of Next Steps

- We are in month 4 of the 2-year implementation period of the EV Charging Station Pilot Program; so far:
 - 2 approved permit applications
 - 2 denied applications for installation in the ROW; recommended installation within private property
- Modifying and adapting the program as we obtain feedback from our residents
- Permanent program implementation by September, 2022
- Looking forward to a successful implementation!





Questions?

Montgomery County



Utilities Updates



Closing Remarks – Deputy Secretary Lewis

- Next Meeting March 2021