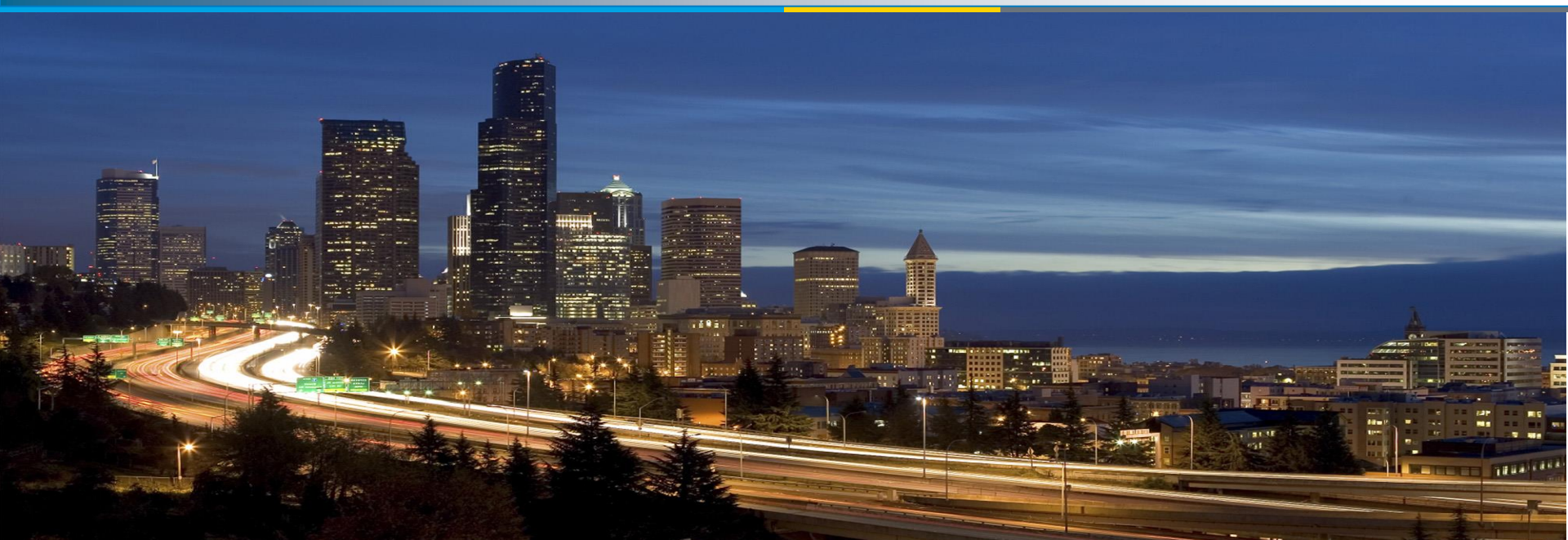


Mid-Atlantic Electrification Partnership



A Regional Electrification Ecosystem
of Intermodal Leadership for Efficient
Intercity Travel and Community Benefit

TPB Technical
Committee
Agenda Item 11
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Project Objective



The Partnership will enable and foster a regional ecosystem allowing all sizes of electric vehicle (EV) use for fleets, Transportation Network Companies and consumers, connecting and benefiting the region's localities through multiple electric vehicle and infrastructure sub-projects, including focus on multimodal hubs, airports, train and bus stations, marine ports and underserved communities.

Key Partners



An Exelon Company



Energy Efficiency & Renewable Energy

VEHICLE TECHNOLOGIES OFFICE



Virginia Department of Mines Minerals and Energy



Maryland Department of the Environment



MOBILITY GROUP | ELECTRIFICATION | CONNECTED | SHARED | AUTONOMOUS



An Exelon Company

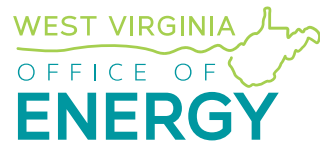


TRADEPOINT ATLANTIC

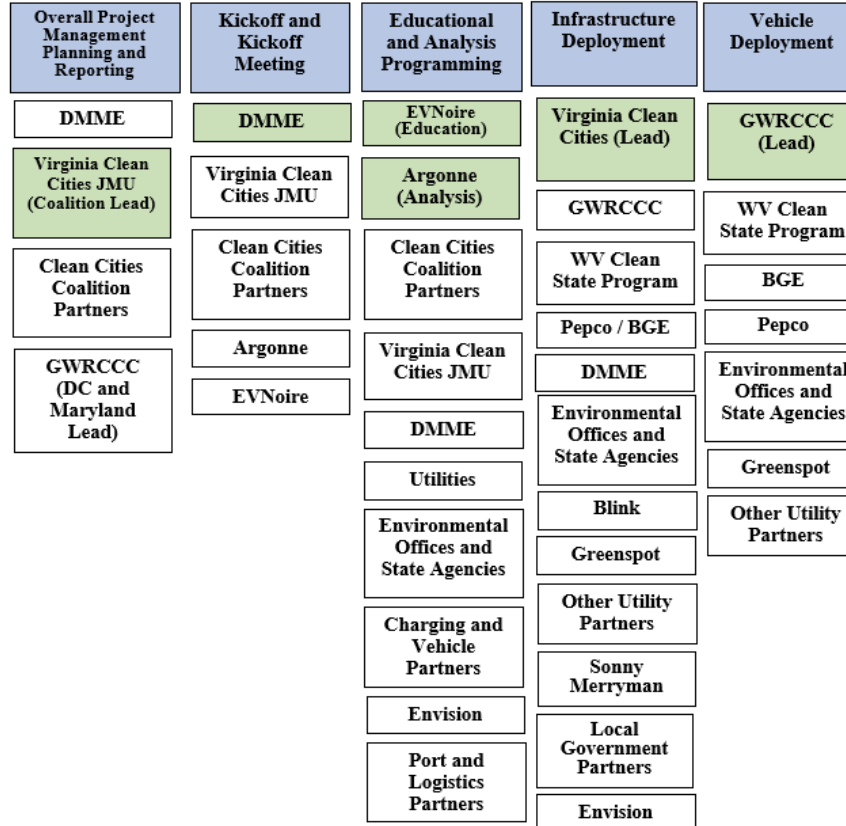


Dominion Energy

Regional Clean Cities Leadership



Project Work Structure



2021 Task Plan



Milestone	Type	Description
EVSE Criteria Set	Technical	Develop a data collection plan and model for identifying suitable locations for new or expanded EVSE in the VA, MD, WV, and DC area based on current and future parameters
Charging Evaluation Completed	Technical	Analyze the placement and feasibility of fast chargers (DCFCs) for medium- and heavy-duty electric vehicles and for light-duty EVs on major roadways and regional multimodal hubs and energy corridors and publishes report. Initial data collection plan with ports and TNCs
Educational Materials Finalized	Technical	Educational Materials will be developed/presented to affected communities for input and confirmed
Infrastructure Initiated and Vehicles Deployed	Technical	Initial Infrastructure and vehicle projects initiated
Launched	Go/No Go	Complete all community/educational events, EV charging stations and electric vehicle deployment

Project Timeline



	Quarter	Kickoff & Report	Analysis	SM DCFC	BGE DCFC	Pepco DCFC	Solar Charging	EV School buses	EV Shuttles	Education Events	WV MD Corridor	EV Rideshare	Hub Rideshare	144 Hub L2	19.2 L2
2020	1	Kickoff		Start			Start	Start	Start	Plan					
2021	2	.	Start	.	Start	Start	.	.	.	Start		Start		Start	Start
	3	.	2	Done	.	.	.	.	.	3	Start	.		0	20
	4	.	.		.	.	.	2	2	5	2	33		0	60
	5	Report	3		10	5	.	.	.	7	.	.		10	75
2022	6	.	4		.	.	1	.	.	9	4	.	Start	20	100
	7	.	.		Done	Done	.	.	.	11	.	66	.	50	115
	8	.	.				.	4	4	13	.	.	.	80	125
	9	Report	5				.	.	.	15	6	.	.	100	150
2023	10	.	.				Done	.	.	17	.	.	50	110	175
	11	.	6					Done	Done	19	.	.	.	120	175
	12	.	.							21	.	Done	.	144	200
	13	Done	Done							Done	Done		Done	Done	Done
	Goal:	100	8	2	20	12	2	6	4	23	8	100	72	144	200



Educational Series Launch (EV NOIRE, Coalitions & ANL)

- The recipient will meet with community leaders, identify partners, plan and develop educational materials, data collection plan for ride and drives and the outline for events
- The recipient will hold approximately eight community forums and educational events *in environmental justice communities*
- The recipient will develop a comprehensive ecosystem strategy team with all partners throughout this period including release of data collection plans for all 3 models and initial ANL corridor analysis and project documentation



Infrastructure Study and Development and Ecosystem Launch (VCC, SM, Blink, BGE, Greenspot, WVCF, Pepco, GWRCCC & ANL)

- Rideshare charging with approximately **ten 160 kWh DC Fast Chargers** deployed in Maryland
- The recipient will launch For-Hire EV ecosystem with the **first two (of ten) DCFC Deployed in DC for Taxi Cabs/TNCs** that lack DCFC
- The recipient will gather data and provide baseload ecosystem support with approximately **sixty-six 19.2 kWh L2 Chargers** deployed in region The recipient will launch school infrastructure ecosystem with 60 kWh DC Fast Chargers (DCFC) deployed at approximately two heavy-duty equipment sites in Virginia, designed for school bus recharging and capable of servicing approximately eight vehicles The recipient will launch renewable infrastructure analysis with first solar deployed in WV for EV Pilot
- The recipient will launch corridor with approximately four DCFC and approximately two L2 deployed at two state facilities in WV



Vehicle and Port Study and Deployment Launch (GWRCCC, ANL, Ports, BGE, WV, MDE, Greenspot, Tradepoint Atlantic)

- The recipient will launch approximately ***thirty-three rideshare electric vehicles*** deployed in Maryland
- The recipient will launch educational ecosystem with approximately two EVs deployed for educational programmatic purposes in WV government and airport along with EV charger access at state government and solar powered charging pilot
- The recipient will launch EV School bus efforts with approximately two EV school buses deployed in Maryland
- The recipient will launch ***Port electrification*** including, data plans and discussions at each port facility for vehicle efficiency and electrification and preparedness for vehicles and infrastructure
- The recipient will compile existing geospatial data on current electric vehicles, travel patterns, EVSE availability, community vulnerability & charging patterns

Energy Zones Mapping Tool (EZMT)



For Mid-Atlantic Electrification Partnership—Argonne’s EZMT tool will provide both a mapping resource, and a platform to share the results of this work:

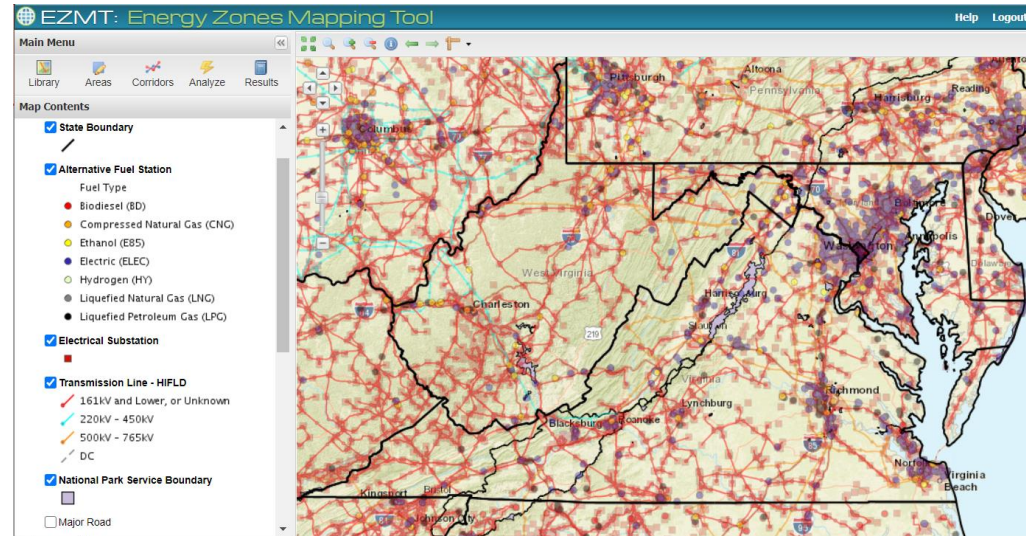
- Display energy infrastructure, hourly traffic volumes, truck stop locations, and other layers.
- Develop metrics to evaluate charging locations
- Quantify feasibility of the locations

Planned additions from this project:

- Map display of analysis products
- Downloadable data
- New modeling layers

Argonne will create an overview of the analysis, and host and record a demo on how to use the EV data and tools in the EZMT.

EZMT modeling results will also be used to analyze the buildout of DCFC infrastructure along alternative fuel corridors within the region.



Example EZMT map view of the project area, with alternative fuel stations, substations, transmission lines, and national parks. www. <https://ezmt.anl.gov/>