EV Policy Blueprint for Action:
What are the high priority market interventions?

Pennsylvania Electric Vehicle Policy Bootcamp
August 6, 2020
2019 & 2020: OEMs Lean In

- **BMW:** 33% of sales to be EV by 2025, 50% of sales be EV by 2030
- **GM:** To announce 23 electric nameplates by 2023
- **HYUNDAI/KIA:** 1 million EVs in 2025
- **TOYOTA:** 1 million EV sales per year by 2030
- **NISSAN/RENAULT:** 1.5 million cumulative EV sales by 2020
- **VW:** 20-25% of annual sales EV by 2025
Our Experience Accelerating EV Adoption
First: Start Local, Demonstrate Results

Example: The EC's Accelerator Community Approach

Highly active “EV ecosystem” to accelerate EV adoption in targeted communities

First launched in Fort Collins, Colorado in 2013.

Outcome:
EV Sales 8 times higher than national average within 3 years.
Our Experience Accelerating EV Adoption
Scale Up Impacts
State EV Policy Accelerator Program

Priority States
PA, VA, NC, MI, NV

POLICY BLUEPRINTS
RAPID RESPONSE
POLICY TOOLKITS
TECHNICAL ASSISTANCE
The EC will be partnering with state leaders to support and create ambitious policy in order to drive all sectors of the EV market.
States Revving Up
But Still a Ways To Go

$2.7+ Billion Divided Among the States, plus $2B from Electrify America investments

Map shows 37 states using full 15% allowable for EVSE

Other funding used for vehicles and incentives
Why Pennsylvania?

• High Level Leadership
• Existing Policy Efforts
• Potential for GHG Impacts
• Other Key Considerations
# Pennsylvania

## EV Market In Context

<table>
<thead>
<tr>
<th>State</th>
<th>EV Sales (2019)</th>
<th>EV Market Share (2019)</th>
<th>BEVs per 1k</th>
<th>DC Ports per 1k</th>
<th>DCFC Ports per 1k BEVs</th>
<th>L2 Ports per 1k EVs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>1,008</td>
<td>4.77%</td>
<td>2.94</td>
<td>0.03</td>
<td>11.43</td>
<td>142.70</td>
</tr>
<tr>
<td>Maryland</td>
<td>6,762</td>
<td>2.06%</td>
<td>2.44</td>
<td>0.07</td>
<td>29.07</td>
<td>74.07</td>
</tr>
<tr>
<td>Delaware</td>
<td>782</td>
<td>1.65%</td>
<td>1.48</td>
<td>0.07</td>
<td>46.26</td>
<td>45.11</td>
</tr>
<tr>
<td>New Jersey</td>
<td>9,638</td>
<td>1.59%</td>
<td>2.34</td>
<td>0.04</td>
<td>16.47</td>
<td>28.00</td>
</tr>
<tr>
<td>New York</td>
<td>14,382</td>
<td>1.40%</td>
<td>1.30</td>
<td>0.03</td>
<td>21.96</td>
<td>72.61</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>5,960</td>
<td>0.91%</td>
<td>1.06</td>
<td>0.02</td>
<td>19.60</td>
<td>54.87</td>
</tr>
</tbody>
</table>

Source: Atlas Public Policy
Pennsylvania EV Market In Context

Source: Atlas Public Policy
Pennsylvania Barriers to EVs

- Policy & Regulations
- Supply Chain
- Technology & Infrastructure
- Awareness
- Economic
- Decision-Making
Near Term Opportunities

- Light Duty Consumer Adoption
- Freight
- School Buses
- Infrastructure and Rates
Light Duty Consumer and Fleet Adoption

**Individuals**
Expand EV access and awareness

- Sales targets
- Direct EV Sales (HB 1901)
- Expanding education and incentives

**Public & Private Fleets**
Encourage and support fleet acquisition efforts

- EV First policies
- Combining Capex and Opex to realize TCO savings
- Fleet EV procurement or GHG reduction targets

**Mobility / TNC**
Partner with localities to incentivize high utilization vehicles

- Clean miles standard
- Queuing, carpool lane access, and other QoL incentives
- Low / zero emissions zones
Opportunities for Freight

Incentives and Targets

- CA Advanced Clean Truck Rule
- MD/HD fleet procurement goals & procurement requirements
- Toll reductions
- Sales tax exemptions
- Weight limit exemptions
- Zero/Low Emission Zones
- Clean Fuels Standard
- Green Loading Zones
- Truck Stop Electrification Requirements

Utility Programs

- Streamlined EVSE Permitting
- Recovery of Cost - "Behind the Fence" Charging Infrastructure
- On-bill Financing – EVSE upgrades
- Commercial Rate Design
- Utility EVSE Ownership
Opportunities for School Buses

**Reduce Capital Burden**
- Add and Expand Incentive Programs
- Appropriate VW Settlement funds
- Combine capex and opex budget lines

**Procurement**
- Fleet policy requiring fixed EV acquisitions
- EV First policy

**Emission Targets**
- Require annual fleet reduction in GHG

**Utility**
- Utility partnership/investment
- MD/HD Specific Rates, Time of Use
- Address Demand Charges
Opportunities for Rates and Charging Infrastructure

**Infrastructure**
- (SB 596) Framework to build comprehensive EV Charging Infrastructure
- EV/EVSE Ratio Targets

**Rate Design**
- Time of Use Rates
- Address Demand Charges
- Direct utilities to file EV pilot programs and rate cases
- Utility role in EVSE rollout

**Electric Corridors**
- Statewide corridors
- Regional corridors
- Northeast Corridor Strategy
- Northeast Electric Vehicle Network

Regional Greenhouse Gas Initiative a potential revenue stream for EVSE and other EV projects.
Electrification Coalition
Changing the Future of Transportation.

Online:
www.electrificationcoalition.org

Contact:
Alissa Burger
Program Manager, Electrification Coalition
aburger@electrificationcoalition.org
Now We Want to Hear From You!

Fishbowl Discussion
How Does a Virtual Fishbowl Work?

Players engaged in conversation

Observers

Be Respectful

Keep it to the Point

Chatham House Rules
Economic Development

• Electric transportation-related industry - $434 million annually (0.6% GSP)
• Five-year industry job growth forecast: +24%
• Five-year overall economy job growth forecast: +3%