Opportunities to Accelerate Public Sector EV Fleet Transition
The Electrification Coalition (EC) is a nonpartisan, not-for-profit group of business leaders committed to promoting policies and actions that facilitate the deployment of electric vehicles on a mass scale in order to combat economic, environmental, and national security dangers caused by our dependence on oil.
Reduce our National Dependence on Oil

Electrification of transportation - best solutions for reducing U.S. oil dependence, insulating from oil price volatility.

- Approximately 70 percent of U.S. oil consumption occurs in the transportation sector, with 40 percent in light-duty vehicles.
- Transportation is 94 percent reliant on oil-based fuel for energy.

**U.S. PRIMARY ENERGY DEMAND, 2013**
- 37% Oil
- 30% Natural Gas
- 20% Coal
- 8% Nuclear
- 3% Hydro
- 3% Renew.

**PETROLEUM FUEL DEMAND BY SECTOR, 2013**
- 4% Residential
- 2% Commercial
- 24% Industrial
- 70% Transport
- 1% Electric Power

Source: DOE, EIA
Economic Benefits of Electricity

The price volatility of other transportation fuels threatens U.S. and household economic security. EV operating costs are much lower than ICE.
ELECTRICITY IS
DIVERSE
DOMESTIC
CLEANER
Fleets Maximize Benefits of EVs
A handful of characteristics associated with fleets make it much easier for them to overcome the basic barriers to adoption.

### ADVANTAGES OF FLEETS AND FLEET OPERATORS FOR EV DEPLOYMENT

<table>
<thead>
<tr>
<th>Area</th>
<th>Benefits</th>
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<tbody>
<tr>
<td><strong>Total Cost of Ownership Approach</strong></td>
<td>Fleet managers rank TCO as the most significant factor in acquisition decisions</td>
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<td><strong>Route Predictability</strong></td>
<td>Lower infrastructure investment; known impact of transition to new technology</td>
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<tr>
<td><strong>High Utilization Rates</strong></td>
<td>High VMT/vehicle increases ROI and lowers cost per mile</td>
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<td><strong>Use of Central Parking Facilities</strong></td>
<td>Lower infrastructure investment; economies of scale in installation</td>
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<tr>
<td><strong>Importance of Maintenance Costs</strong></td>
<td>Lower maintenance costs of new technology = substantial cost savings</td>
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<tr>
<td><strong>Lower Fuel Prices</strong></td>
<td>Electricity is less expensive than petroleum</td>
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<tr>
<td><strong>Return on Investment</strong></td>
<td>In the right applications, EVs will generate an ROI during their useful life</td>
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<tr>
<td><strong>Sustainability Initiatives</strong></td>
<td>EVs contribute to sustainability initiatives around reduced GHG emissions and/or petroleum use</td>
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## Traditional vehicle purchasing

Traditionally, most public sector fleets will purchase vehicles via a competitive solicitation.

### Benefits
- Full ownership and control over fleet assets, maintenance, and fuel
- Known and accepted bid process: has served many fleets well
- Well-documented discounts, typically 10-20% off MSRP

### Drawbacks
- Limited resources to acquire all of the necessary vehicles in a given year
- May not include a mechanism to access tax credits
- High labor costs to implement competitive process
### Bundling vehicles and infrastructure

Engaging the same suppliers to handle multiple components of an EV deployment: vehicles, infrastructure, telematics, etc.

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<th>Drawbacks</th>
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<td>• Simplifies the procurement process</td>
<td>• May not allow for picking a preferred provider for each specific subcomponent of an EV project</td>
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<td>• Enables efficiencies of vertical integration, for instance when the fuel provider also installs the refueling infrastructure</td>
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<td>• Can shorten contracting time</td>
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# Cooperative / Aggregated Purchasing Opportunities

## Benefits

- Enables fleet to own the assets
- Reduces overall labor costs and timelines of bid solicitation, review, award
- Produces lower prices through higher demand.
- Simplifies contracting processes – single agency issues contract
- Increased flexibility in vendor choices

## Drawbacks

- May not always produce the lowest prices
- Procurement staff may not be in favor of new process
- The options provided on the bid list may not meet local procurement requirements, such as procuring from small businesses or minority- and women-owned businesses
- Vehicles desired may not be available through cooperative purchasing organizations
Managing an EV deployment in fleets

Proper education and training, alongside a data-driven approach to management, is necessary for the transition to new technologies.

Driver Training
Experiential and classroom training to ensure that drivers are confident operating and refueling new technology.

Maintenance Tech. Training
Critical to ensure that maintenance personnel are trained to perform diagnostics, maintenance and repairs on new technology.

Data Management
All fleet must have an Management Information System (MIS) to track inventory and operations, establish Key Performance Indicators (KPI).

Telematics
Vehicle operational data can be an invaluable management tool. Though, it can be expensive, voluminous, and is often underutilized.
Climate Mayor Fleet Transition – Launching September

Partnership between Climate Mayors, EC, Sourcewell

Climate Mayors – Power to Convene
EC – EV Technical Expertise – Training, Analysis, Policy

Sourcewell providing the mechanism
The Electrification Coalition
Revolutionizing Transportation and Achieving Energy Security

Online:
www.electrificationcoalition.org
www.energysecurecities.org

Download the Electrification Roadmap: www.electrificationcoalition.org/policy

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