Protect Our Coast: Drive Electric

Policies for Local Governments to Accelerate Electric Vehicles

Electric vehicles can save money for our communities, promote public health, and protect our coasts by offsetting the need for new offshore drilling. This toolkit is a catalog of local policies that can be enacted to facilitate the transition to electric vehicles in an effective, sustainable, and equitable way. It is a comprehensive approach with specific recommendations based on local electric vehicle (EV) initiatives we have compiled of effective policies from around the country with links to real-world examples. The objective is not to suggest that every city must implement all of these policy recommendations. We encourage public officials to use this catalog as a menu of options to best fit the needs of their communities as they develop their action plans.

I. **Create an Overarching Transportation Electrification Plan**

Local governments can create transportation electrification plans to provide an overall framework and roadmap for community-wide transportation electrification. The plan can incorporate different elements from each of the categories below--and more--and will serve to guide actions in the months to come. By leveraging federal and state funds for electrification, the costs to local governments can be reduced. Additionally, your plan should integrate with the local utility’s plan. Hopefully, your local utility already has a plan and this partnership could inform and improve each other’s plan.

Examples:
- Atlanta, GA
- Portland, OR
- Seattle, WA

II. **Establish EV Municipal Fleet Goals**

Local leaders can establish goals to electrify their fleets which save taxpayer dollars while reducing pollution and providing healthier outcomes for their citizens and the environment. The positive economics of transitioning to electric fleets is a business reality that many municipal leaders are getting ahead of. Further savings may be
achieved by leveraging funds available for fleet procurement from the Volkswagen diesel emissions settlement fund.

A. Procurement Goals
Set procurement goals for how many electric vehicles should be in your fleet in years to come. These goals could be achieved in several ways:

1. Develop an electric vehicle acquisition goal
2. Consideration of electric vehicles first for light-duty
3. Preference for low/no emission vehicles
4. Allow for “Total Cost to Own” to justify EV purchase, versus only upfront purchase price
5. Leasing options (gaining access to the federal EV tax credit)

Examples:
- Boulder County, CO: [Background] [Resolution]
- Seattle, WA: [Background] [Resolution]
- New York City: [Background]

B. The Climate Mayors' EV Purchasing Collaborative
The Collaborative provides a host of resources to assist cities/counties to achieve fleet electrification -- including favorable prices on electric vehicles. Through manufacturer-direct contracts, the Collaborative leverages municipalities’ collective purchasing power to lower the cost of EVs and charging stations for public entities. The Collaborative also allows local governments to monetize a portion of the federal tax credit incentive for EVs, via an innovative EV-leasing option. Additionally, the Collaborative can help identify and prioritize which vehicles to transition first. Contact jwalker@electrificationcoalition.org for more info on how the Collaborative can assist your city or county.

C. Include Local Utilities
The local utility’s plan or policies may encourage certain types of EVs. For example, some utilities are encouraging school bus or other large vehicle acquisitions even ahead of light-duty vehicles.

III. Promote EV Charging Access & Infrastructure
Electric driving requires a paradigm shift in how we fuel our vehicles as fueling can take place at home, in the community or along our highways. People’s perceived lack of visible charging stations is cited as one of the top barriers that contribute toward car buyers not purchasing electric vehicles. Thus, designing and planning charging systems will require addressing unique needs and removing barriers that local leaders are in a position to help with. Local governments can install and own EV charging equipment and adopt policies to encourage private investment in charging infrastructure. The cost of installing chargers may be reduced by leveraging funds available for charging equipment from the Volkswagen diesel emissions settlement fund.

A. EV-Ready Building Codes

“EV ready ordinances” ensure that buildings that are permitted today are preparing for the coming electrification of transportation. EV ready ordinances require new homes, buildings, and parking structures to have the conduit and wiring in place to accommodate incremental additions EV chargers later on. It does not mean installing the charging stations. It is much cheaper to install the wiring during initial construction rather than retrofitting existing buildings and parking lots when the need arises later. For most applications, the recommendations are 10% of new spaces for projects over 100 spaces, Level II charging with 208 Volts/40 Amps or 240 Volts/40 Amps, and an EV charging zone.

Examples:
- Atlanta, GA: Background Ordinance
- Miami-Dade County, FL: Ordinance
- Seattle: Background Ordinance
- New York City: Ordinance
- Plug In America/Sierra Club Template Ordinance

B. Multi-Unit Dwelling Charger Support and Incentives

EV drivers who live in multi-unit dwellings (MUDs) like apartment buildings and condos need access to charging EVs at or near their home yet often do not have a power outlet handy and cannot install new a new outlet or charger, as homeowners can. Yet MUD residents should not be denied access to the benefits of driving an EV because of this challenge. Rather, installation of shared charging equipment at MUD developments should be encouraged. When new MUD projects are being considered for permitting, encourage the developer to consider installing EV infrastructure.
Example:

- Florida State Statute protects condo owners from prohibitive rules by Homeowner Associations regarding installing a charging station in their common element parking area.

C. Streamlined Charger Permitting Process
Cities and counties can make the permitting approval process easier for the installation of EV chargers with strategies such as one-day turnaround, online design review services, and expedited inspection for EV charger permits.

Examples:

- City of Chicago Online Permitting Process
- Many cities in California--from small to large--, pursuant to Assembly Bill 1236 (i.e. Burbank, CA)

D. City/County Charging Station Installation Guidelines and Best Practices
Cities and counties can clear up any confusion around how to go about installing EV charging equipment by providing clear expectations to stakeholders such as step-by-step instructions or installation guidelines. The city/county can maintain hard copies of the resources and digital copies on their website for installation at different types of sites.

Example:

- Atlanta, GA EV Readiness Workbook
- Chicago, IL Multi-Unit Dwelling EV Charger Installation Guide

E. Workplace Charging For City and County Employees
Workplace charging is one way to encourage and support employees who drive electric. It extends their all-electric driving range, enabling those with long commutes or those who lack home charging to drive electric. According to the Department of Energy, an employee with access to workplace charging is six times more likely to drive electric than the average worker. It can attract visitors as well. It can be free or have a subscription fee. Additionally, daytime charging can easily take advantage of low-cost, environmentally friendly solar power.

Examples:
F. Workplace Charging for Private Sector Employees

Encouraging workplace charging in your community is another way to build infrastructure. When new projects are being considered for permitting, encourage the property/business owner to consider installing workplace charging.

Examples:
- MetLife
- TECO
- Zappos

G. City/County-Owned Public Charging Stations

Cities can spur EV adoption in the community by providing public access to EV charging stations. There are examples of both free and pay-to-charge systems.

Examples:
- Coral Gables, FL
- North Florida Transportation Planning Organization
- Alameda County, CA

H. City/County-Owned Fleet Charging Stations

Some cities install charging stations to support their fleets' electrification specifically and do not designate them for public use. This ensures the stations are always available for their use.

Example:
- City of Seattle

I. Permit Curbside Charger Installation in Public Right of Way
A challenge for some businesses and residences is lacking off-street parking at which to install a charging station. Some cities have addressed this issue by permitting installation of curbside EV chargers.

Examples:
- New Orleans, LA
- Seattle, WA
- Plug In America/Sierra Club Template Ordinance

J. **Pair EV Charging Stations with Renewables**
Several companies offer solar canopies to generate the power for charging stations. Solar canopies have the additional benefit of providing an attractive, shady parking place so cars are sheltered from the sun. Battery backup systems can be added to solar canopies co-located at critical facilities such as water treatment plants or hospitals.

Example:
- University of Central Florida, Orlando, FL

K. **Free Up Access to Chargers with Instructional Signage and Code Enforcement**
One challenge for public EV charging is parking spaces with chargers getting blocked by non-EVs or EVs that are not actively charging. Local governments can discourage this from happening by ensuring adequate instructional signage that only actively-charging EVs (determined by whether or not they are plugged in) should be parked in those spots. Some states, such as Florida, outlaw non-EVs from parking in EV-designated spaced, but local enforcement may not happen. Enforcement can be encouraged and in states without such legislation, it can be added to code.

Examples:
- Miami-Dade County, FL Ordinance
- Florida State Statute
- Sierra Club/Plug In America Template Ordinance

L. **Wayfinding Signs for Drivers to Locate Chargers**
Many potential EV drivers fear not being able to find public charging when they may need it. Local governments can help increase visibility of the availability of EV chargers and also help EV drivers better utilize existing EV
chargers by providing wayfinding signs on the street for public charging stations. Additionally, EV charging locations can be made highly visible with signposts and painted parking spots.

IV. **Establish Education and Outreach Initiatives**

Most American drivers are not aware of the cost, health and environmental benefits of driving electric. Educational opportunities can be offered to both staff and citizens to increase understanding of electric vehicles, charging, and the cost savings to taxpayers. Examples include having EV information on your website, hosting outreach activities such as "ride and drives" at which staff and citizens can ride or drive in electric vehicles, and outreach to local business fleet departments to offer information about both light and heavy-duty electric vehicle options.

A. **Consumer Education and Informational Materials**

Cities and counties can partner with non-profit organizations to expand engagement and increase understanding among citizens about the practicality and benefits of electric driving. They can host information on their website about their own EV initiatives as well as links to additional resources, such as the PlugStar Program.

Examples:
- Boca Raton, FL
- Coral Gables, FL
- Denver, CO
- Sacramento, CA

B. **Outreach Events**

Partnering with other organizations to host electric vehicle community events are a great way to bring current EV drivers together with community members who want to learn more. Events can take place as showcase events, ride and drives, or parades. The best way to get people excited about EVs is for them to test drive them. It also offers an opportunity for elected officials to show their support for electric transportation. Additionally, encourage your local utility to participate.

Examples:
- St. Petersburg Earth Day
- National Drive Electric Week
V. **Incentivize Electric Driving**
EV incentives like financial incentives and driver perks can have a significant impact on total EV sales particularly among lower and middle-income consumers.

A. **Parking Incentives for EVs**
   1. Discounted parking rates for EVs (i.e. free metered parking or dedicated parking spaces; free parking at special events)
   2. Dedicated EV-designated parking spaces and signage (include training for law enforcement for blocking EV spots [i.e. car must be plugged in in order to qualify])

Examples:
   - **Coral Gables, FL** Provides free parking and EV charging.
   - **Sacramento, CA** Provides free or discounted parking and charging to EV drivers. Participants receive free parking until EV parking transactions exceed 5% of overall parking transactions in any one garage, at which point all EV program participants for that garage will be charged 50% of regular parking fees for the garage.

B. **Reduce/Waive Permitting Fees for Charging Infrastructure**
Cities and counties can reduce the cost of installation of charging by waiving the permitting fees for installation of charging equipment.

Example:
   - **Anaheim, CA**

C. **City EV Charging Station Incentives**
Cities offer a rebate for the equipment and labor costs associated with the installation of both public and private EV charging stations. Cities can direct residents toward grant opportunities such as the Charge Up! program, which covers up to 50% of EVSE costs. The funds come from pollution recovery fees.

Example:
   - **Sarasota County Charge Up! Program**

D. **EV Group Buy Program**
Local governments can partner with local dealerships to coordinate group buy
programs for EVs. Group buy programs help raise consumer awareness about opportunities to purchase an EV and help consumers get a good deal.

Example:
- Green Energy Consumers Alliance

VI. Establish EV Public Transportation Goals

Electrifying a municipal public transportation system is a no-regret solution that provides significant cost, health, and environmental benefits. According to the US Department of Transportation, every zero emission bus is able to eliminate 1,690 tons of CO\textsubscript{2} over its lifespan. Additionally, electric buses reduce fuel and maintenance costs by $300,000-350,000 over the lifespan of each bus.

A. Electric Buses in Public Transportation

Transit buses are one of the most effective uses of electric vehicles, saving money, improving riders’ experience, and reducing local air pollution. For example, Greensboro, North Carolina is transitioning its transit buses to electric and will be saving $300,000-350,000 per bus over the lifetime of each vehicle due to dramatically lower maintenance and fueling costs. Additionally, federal cost-share funding for transit buses efficiently leverages local funding. Cost-share funding via the federal Low or No Emission Vehicle Program - 5339(c) and the Diesel Emissions Reduction Act (DERA) for buses efficiently leverages local funding.

Examples:
- Miami-Dade, FL
- Florida State University Tallahassee, FL
- Broward County, FL

B. Electric Taxi, Uber/LYFT Targets

Transportation Network Companies (TNCs) are increasing among cities and their greenhouse gas emissions are also increasing. Cities and Counties should engage directly with TNCs to ensure EV adoption and charging infrastructure is being planned accordingly. Cities can also leverage public-private partnerships to install DC fast charging ‘hubs’ to grow the infrastructure needed to support TNC electric drivers. High powered hubs can also be co-located with transit, and school bus infrastructure to maximize efficiency and decrease costs.
Examples:
● Atlanta, GA

C. School Districts EVs, Charging, and Electric School Buses
School districts have very large potential savings to be realized by electrifying their bus fleets. Electric school buses save on average $50,000 over their lifetime due to low maintenance and fuel costs and significantly reduce children’s exposure to harmful pollutants in diesel exhaust from conventional buses. Additionally, school districts can electrify their light-duty vehicle fleet and provide charging in their parking lots.

D. New and Emerging Shuttle Services with EVs
Many private transportation companies have developed creative electric solutions to address last-mile and local transportation goals.

Example:
● Ft. Lauderdale, FL

VII. Expand Equity and Access
Frontline communities typically experience disproportionately negative impacts from pollution caused by the transportation sector for several reasons including but not limited to proximity to major roadways. These emissions increase the risks of asthma, cancer, and other pollution-related illnesses. Frontline communities also experience stronger barriers to EV due to higher upfront costs and lack of access to charging infrastructure. These burdens and barriers warrant a targeted approach to increasing electric transportation equity and access among members of frontline communities.

A. Voucher, Point of Purchase Rebates and Used EV Rebates for Low-Income Drivers
Vouchers and point of purchase rebates are more effective than traditional rebates for helping lower the initial cost for low-income consumers, by reducing the amount of financing needed. Also, allowing used EVs to qualify for rebates makes them, even more, accessible for low-income customers. Additionally, targeting incentives to low-income customers via an income cap directs limited funds to consumers who need the benefit the most.

Example:
B. **Carshare Programs**
Partner with a community development organization to develop an EV car share pilot for members of the community with limited transit opportunities.

Example:
- Indianapolis BlueIndy Car Share
- Forth Community Electric Vehicle (CEV) Project

C. **Outreach Events in Frontline Communities**
Host education and outreach events in frontline communities to ensure all community members are engaged in electric transportation opportunities and awareness of the benefits. Community input meetings and events are more likely successful if they meet community members where they are including language interpretation, child care, support with travel to meetings and attendance incentives.

D. **Charging Access for Frontline Communities**
When opportunities for citing locations for charging stations occur stakeholders should advocate equitable access to frontline communities.

Example:
- Duke Pilot Florida 10% Requirement for Income-dependent communities

E. **Prioritize Frontline Communities for Electrification**
As more of the public transportation sector becomes electrified frontline communities should be prioritized for electric buses. Research that has shown that "pollution inequity" associated with air pollution disproportionately causes poor health outcomes to frontline communities. Because electric transit buses have no road-level pollution their routes should be serving communities that would benefit the most from them.

Example:
- Mother Clara Hale Bus Depot, NYC

VIII. **Work with Local Utilities**
Local utilities are essential partners - after all, they provide the electricity. Because of their role, engaging with your local utilities should be a first step. Local utilities can be partners in increasing EV adoption rates. They can offer EV friendly rates where it is cheaper to charge an EV at low-use times of the day and can install charging infrastructure through pilot programs. Additionally, municipalities can partner with local utilities to create education and outreach events and programs. Cities and counties that have municipal utilities have a unique opportunity to work closely with their electricity provider to develop pilot programs and provide strategic direction.

A. EV Charging Infrastructure

The local utility will be in a good position to help draft EV-ready building codes and design incentives. Also, the utility needs to know where you are encouraging the charging stations so that it can take early action to ensure that its distribution system is ready to deliver the power. The utility may have ideas on where to direct that infrastructure, may be willing to install it for free for certain fleet uses, or may have solar projects in the works that would be easily paired with an EV charger. Finally, the utility may have experience with different EV chargers or installers that would suggest criteria for offering an expedited permit, and when more cautious scrutiny may be needed.

B. Utility EV-Friendly Rates

Many utilities offer rates that encourage EV drivers to charge during the time of day when the utility has surplus energy. This does several things. It helps the utility to keep a consistent outflow of energy without having to turn on additional generation. It benefits all utility users this way by selling more energy but in a more consistent pattern. It benefits EV drivers because they are charging their EV when rates are lower.

Example:

- Georgia Power, GA

C. Utility EV Charger Pilot Programs

Utilities can benefit from pilot programs to get comfortable with EV programs. Such pilot programs can focus on deploying utility-owned charging infrastructure and offering rebates to customers for the installation of non-utility-owned chargers. Pilot programs can help utilities gather data and grow their understanding of how EV customers interact with the grid.
Example:
  ● Duke Energy Florida Park and Plug program

D. **Streetlight and Power Pole Charging Access**
Cities can use the electricity already wired for LED converted lightposts to easily allow for EV charging. There are devices which can retrofit a light post in a cost-effective manner to allow for charging of the electricity.

Examples:
  ● Los Angeles, CA