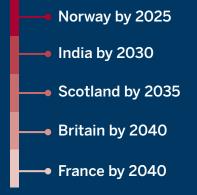
# Electric Vehicle Adoption in Your City

With the advent of more diverse and reliable electric models, purchasing electric vehicles has become a feasible and advantageous option for local governments and residents. Electric vehicles are the future of the automobile industry. They are more efficient and require less maintenance than traditional models, and they present a great opportunity for local governments to experience cost savings while reducing air pollution.

In the Midwest, there are more than 20 models of electric vehicles available for purchase, and new

#### The Future is Electric

Throughout the world, nations have pledged to phase out the sale and production of gas and diesel vehicles. Countries include:



China, the world's leading automobile manufacturer, has also announced its intentions to phase out gas and diesel vehicle production.

These major car manufacturers have announced plans to roll out between 15 and 20 new electric models, each:

- Ford
- VolkswagenNissan
- General MotorsVolvo
- Jaguar Land Rover

models are being introduced to the market including garbage trucks, school buses and street sweepers. With a median range of 73 miles per charge, electric vehicles are well suited to fit varying needs of local governments and commuters. Improvements in battery storage and quick-charging technology, as well as country-wide investment in charging infrastructure, have made electric vehicles more effective and accessible than ever.

Cities, towns and counties can spearhead the transition to a low-carbon transportation sector by adopting electric fleets and improving access to vehicle charging infrastructure. Reducing emissions derived from the transportation sector is an essential part of mitigating climate change and improving air quality.

### The Benefits of Electric Vehicles

**Reduced Costs**— Electric vehicles require less maintenance and are more efficient than internal combustion vehicles, leading to lower operating costs. Electricity prices are more stable than volatile gas prices, and fuel costs for electric vehicles are between one-half and one-fourth the costs for conventional automobiles.

**Public Health**— Electric vehicles do not produce tailpipe pollutants, leading to reduced air pollution and improved public health outcomes.

**Mitigation**— Electric vehicles are more energy efficient, producing fewer greenhouse gas emissions. If electric vehicles are charged using renewable technologies then electric fleets can achieve carbon neutrality.



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#### **Tools and Resources for Fleet Conversion:**

There are a variety of resources available to help local governments determine the feasibility of converting to electric vehicles:

**1. Cost Assessment**— The DOE offers the <u>Vehicle Cost Calculator</u> to assess the affordability of electric vehicles.

**2. Federal Incentives**— The DOT and DOE published the <u>Guide to Federal Funding</u>, <u>Financing</u>, and <u>Technical Assistance for Plug-in Electric Vehicles and Charging Stations</u>.

**3. Procurement Assistance**— EV Smart Fleets is developing a multi-state procurement program to make electric vehicles more affordable for local governments. Additionally, the <u>Electric Vehicle Procurement Best Practices Guide</u> provides information about affordable and feasible procurement options for public fleets.

## What About Non-Renewable Electricity Production?

If your utilities are heavily dependent on fossil fuels for energy production, then charging electric vehicles will still produce air pollution in areas near the power plant. However, because electric vehicles can be up to twice as efficient compared to conventional vehicles, there will still be significant reductions in overall emissions. Further, air pollution does not occur at the street-level, meaning ambient air quality will substantially improve with expanded use of electric automobiles.



#### How to Support Electric Vehicle Infrastructure in Your Community



Beyond purchasing electric vehicles for municipal and county fleets, local governments can use incentives and policies to increase access to charging infrastructure. The DOE offers a search tool to find federal, state and local examples of incentives and laws used to encourage electric vehicle adoption and infrastructure development.

Communities can prepare for plug-in charging development by using the DOE's PEV Readiness Scorecard tool. The EVI-Pro Lite tool can estimate the quantity and type of charging stations needed to support regional adoption of electric vehicles. For more information about public charging stations, visit the DOE's Alternative Fuels Data Center.



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