

EV FACTSHEET

Contra Costa County Climate Leaders

A project of Generation Green - a 501(c)(3) nonprofit organization

Find Links to Other Local Government Policy Opportunities at

www.cccclimateleaders.org



WHAT:

Reduce Fossil Fuels with Electric Vehicles (EV) for your City transportation options!

- LEV (Low emission vehicles): a vehicle powered by an electric motor that draws electricity from a battery, but still has a gas combustion engine i.e. (plug-in hybrid electric vehicle)
- ZEV (Zero emission vehicles) plug-in vehicles & fuel cell electric vehicles, with no gas emissions
E-bikes and E-scooters are also considered Zero emission vehicles

WHY:

Cities must comply with Federal, state and local laws; and it is important to recognize that transportation accounts for more than 50% of worldwide greenhouse gas emissions. Local Actions Move the World.

- **INTERNATIONAL:** Countries around the world are setting stricter emissions standards
 - [The European Union set zero CO2 emission standards](#) for all cars and vans registered after 2035. With interim 2030 targets of -55% emissions for cars and -50% emissions for vans
 - [The Global EV Explorer](#) Is a great tool that tracks various countries' policies and measures that support the deployment of electric vehicles (EVs) and zero-emission vehicles (ZEVs)
- **US FEDERAL:** [April 2023, President Biden set a goal of 50% of all vehicle sales to be electric by 2030.](#)
 - Implementing the [Infrastructure Investment and Jobs Act](#) and the [Inflation Reduction Act \(IRA\)](#) investing hundreds of millions into the EV sector, to bolster U.S. manufacturing and supply chains.
- **CA STATE:**
 - California Air Resources Board (CARB) tracks numerous [Bills, programs and incentives](#)
 - [California's Advanced Clean Fleets rule](#) requires public agencies to ensure 50% of their vehicle purchases are zero-emissions beginning this year and 100% by 2027
 - [The California Energy Commission \(CEC\)](#) is the lead agency investing in infrastructure to charge electric vehicles through the [Clean Transportation Program](#), investing up to \$100 million annually.
- **OTHER TARGETS**
 - ["Advanced Clean Cars I and II"](#) a technical report from Sierra Club and NRDC, that analyzes the framework to ensure all passenger cars, trucks, and SUVs will be zero-emission vehicles by 2035!
- **ECONOMICS:**
 - [E-truck fleets are outpacing all expectations](#) and will exceed diesel truck sales by 2030!
 - [Worldwide use and sales of electric bicycles](#) continue to grow dramatically. During COVID, [E-bike sales](#) in the United States surged 269 percent

EV's in Cities can improve Human Health and Safety by reducing emissions

- EVs eliminate tailpipe emissions of NOx and PM2.5, that impact [environmental Justice communities](#)
- Swapping a gasoline-powered vehicle for an EV will [lower the energy needed for driving 50%](#).
- [Studies of EVs per zip code saw decrease in asthma emergency room visits.](#)
- [Electric cars save 17-30% of carbon emissions](#)
- [Swapping out a gas-powered sedan for an electric model saves up a total of 45 metric tons of carbon dioxide equivalent over a lifetime of the vehicle.](#)
- The best way to reduce emissions is to have fewer vehicles on the road!
- [E-bikes save up to 500 pounds](#) of carbon emissions each year, plus provide physical and mental well-being benefits as well!



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Cities can save money by switching to electric vehicles.

- [EV's last longer](#) because they lack the shorter lifespan of an internal combustion engine
- E-trucks have fewer moving parts, which means they need less maintenance and fewer repairs.
- Electric vehicles do not completely fix the problem
 - [Batteries have a large carbon footprint](#): importing resources, toxics from mining & disposal of waste
 - EV Battery lifespan is 12-15 years; longer than most people own their vehicles, so the odds of needing to replace one are low, replacement costs of [\\$5,000 to about \\$20,000](#) continue to drop
 - [Battery prices](#) continue to drop, [Department of Energy \(DOE\)](#) reports shows costs are 90 percent lower in 2023 than it was in 2008. Moreover, this downward trend is expected to continue.
 - In fact, [electric vehicle battery prices are expected to fall almost 50% by 2026](#).
 - Energy is offset by plugging into a solar array
 - Charging at night is cheaper and reduces the load on the power grid during peak day hours.

WHERE:

Cities across the planet, and local case studies show the success of Electric Vehicle policies.

- [The Global EV Outlook Report](#) is a comprehensive annual publication that identifies and discusses recent developments in electric mobility across the globe, provides technology updates and case studies
- [To date 17 countries have set 100% zero-emission vehicle targets](#) and/or the phase-out of internal combustion engine vehicles by 2050.
- UK [banned gas/diesel cars sales after 2030](#) and has a Net ZERO emissions goal by 2050.
- The International Energy Agency (IEA) works to promote a secure and sustainable energy future; and provides [The EV City Casebook](#) sharing best practices on EV deployment efforts.
- China has clearly dominated the EV Market, but it is too soon to count America out. [Read More](#).
- In the US: Los Angeles and San Francisco make the [world's top10 EV cities list](#).
- [Micromobility \(a.k.a personal mobility devices\) studies](#) show: Cities adopting local programs! There are at least 142 major city systems using e-bikes and 265 city systems using e-scooters!
- E-bikes increased by 71% from 2021 to 2022 and the number of e-scooters grew by 28%
- North Americans gained almost 18.7 million hours of additional physical activity through shared micromobility --and replacing motorized trips [More](#).

SPECIFIC CITY EXAMPLES:

- [Boston and Surrounding Areas](#) have added all-electric vehicles and hybrids to their municipal fleets, including in their police, building, public works and traffic enforcement divisions
- [San Francisco](#) leads the way. In 2022, Planning and Land Use Codes were modernized to expedite creation of EV charging networks, in gas stations and parking lots. In 2024, SF launched first [Climate Action Community Grants](#), with \$900,000 to local community organizations; and in 2025 kicks off a high tech public [curbside EV charging program!](#)
- [Fort Bragg](#) committed to replace half of its police fleet with America's [first electric pickup truck](#) purpose-built for police work
- [South Pasadena](#) [South Pasadena](#) has the Nation's first all Teslas Police Fleet! Saving \$4,000 annually per vehicle



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HOW:

Cities are getting things done with Funding, tools and Resources!

FEDERAL:

- [The Biden-Harris Administration](#) Under DOT announced August 2024, \$521 million in grants to build out electric vehicle (EV) charging and alternative-fueling infrastructure across 29 states, eight Federally Recognized Tribes, and the District of Columbia, deploying more than 9,200 EV charging ports.
- [Under USDOE The Advanced Research Projects Agency - Energy](#) The ARPA-E Funds projects to reduce the nation's dependence on foreign energy imports; and reduce energy across all sectors

STATE

- [The California Air Resources Board, Drive Clean](#) provides information and resources for cities and all car buyers looking to purchase cleaner, more fuel-efficient vehicles, search by zip code on available incentives and the environmental impact of different car models

LOCAL BAY AREA

- [BAAQMD Clean Cars for all](#) offers incentives to retire older cars and replace with a cleaner hybrid, plug-in hybrid, battery, or hydrogen fuel cells.
- They also provide a pre-paid card to use for public transit, rebates to purchase e-bikes and more! For a full list of grants and incentives in the Bay Area, see the [BAAQMD resources page](#)
- [PG&E's EV Fleet Program](#) has programs and incentives for cities to convert municipal fleets,, Medium/heavy duty fleets, ebikes and scooters—and easy and affordable opportunities to upgrade infrastructure (charging stations).
- [PG&E's resilience hub grant programs](#) provides grants to help communities build a network of local resilience hubs .A resilience hub provides a physical space or set of resources to power and shelter during climate-driven major weather events
- [San Francisco's Cities Resources Page](#) is well designed and can help others put together a program, and develop their own City Resources page:

NON-PROFITS

- [The Electric Vehicle Association](#) is North America's largest Nonprofit accelerating the adoption of electric vehicles! Over 100 chapters & thousands of advocate members, hosting events and test-drives!
- [Veloz, Electric for All, 40 Million Reasons to go Electric, and Arnold Schwarzenegger's Kicking Gas](#) is accelerating the electric car movement through public awareness & education.
- [The electrification coalition resources page](#) discusses other grants & sharing best practices.

*Questions and for more info on other topics: [Contra Costa Climate Leaders](#) is a non-profit that provides

- [City by City comparison](#) in Contra Costa County
- [With a focus and breakdown tracking Statistics and Electric Vehicle adoption rates per CCC City!](#)

Last Updated 1/5/25 LKoopah

