

OVERVIEW: *The purpose of this paper is to serve as a tool to help local governments prepare for increased adoption of electric vehicle (EV) technology by their residents, businesses and visitors to their jurisdictions. This paper is also meant to advance the ongoing partnership between local governments and Southern California Edison.*

With more than 500,000 plug-in electric vehicles (PEVs) and plug-in hybrid electric vehicles (PHEVs) on California's roads,¹ and millions more to come, many local officials understand that getting their communities EV-ready is not only a sustainability best practice but also an economic development opportunity.

California is leading the EV adoption trend within the United States, with approximately half of all EVs on the road in the U.S. registered here.² As residents and businesses across the state purchase EVs in ever-greater numbers, electric infrastructure will need to support EV charging for EV drivers wherever they choose to live, work and play.

They'll be traveling through cities and counties other than their own — contributing to reduced greenhouse gas (GHG) emissions, improved air quality and reduced noise pollution. They'll be fueling their vehicles with domestically produced clean energy. They'll also seek places to park and charge their EVs as they work, shop and visit attractions.

By tapping into the economic, environmental, public health and quality-of-life benefits of zero-emission vehicles, local governments that are making their cities and counties EV-ready are meeting the needs of their residents, and can gain a competitive edge in attracting new (and retaining existing) residents and businesses.

Action and leadership at the local level is crucial to making transportation electrification a statewide reality. Recognizing very real resource constraints affecting many local governments in California, there is a spectrum of low-cost, high-value actions they can take to accelerate EV readiness and adoption inside and outside of their boundaries.



CALIFORNIA'S EV LANDSCAPE

Bloomberg New Energy Finance's latest forecast shows sales of EVs increasing from a record 1.1 million worldwide in 2017 to 11 million in 2025 and then surging to 30 million in 2030. Specific to California, in 2013, EVs made up 2.4 percent of all new car sales statewide; in 2017, that number jumped to 4.9 percent and to 7.0 percent as of August 2018.³

Electrification of California's transportation sector across all vehicle segments is essential to fighting climate change and air pollution. The transportation sector accounts for 41 percent of the state's GHG emissions and more than 80 percent of its air pollution.⁴

In January 2018, shortly after SCE called for 7 million electric vehicles in California by 2030 (see sidebar, below), Gov. Jerry Brown issued an executive order with a target of 5 million zero-emission vehicles in

California by that same year.⁵ In June 2018, the California Public Utilities Commission approved nearly \$768 million in electric utility programs over the next five years to expand a network of EV charging stations and increase EV adoption,⁶ supporting the governor's vision.

Local governments can be leaders in this statewide effort precisely because of their local expertise — their unique knowledge of the vital transportation routes and arteries within their boundaries and surrounding regions, and of how to best plan for infrastructure in alignment with local land use patterns.

They play a key role in managing the siting and deployment of charging infrastructure needed to support growing EV adoption. Multiple studies have shown the strong correlation between the availability of public charging infrastructure and EV adoption.

SCE's Clean Power and Electrification Pathway

Electrification of cars, buses, trucks and industrial vehicles is one of the central aspects of Southern California Edison's *Clean Power and Electrification Pathway*, a blueprint for how California can realistically achieve its ambitious goals for reducing emissions and air pollution while preserving reliability and affordability for customers.

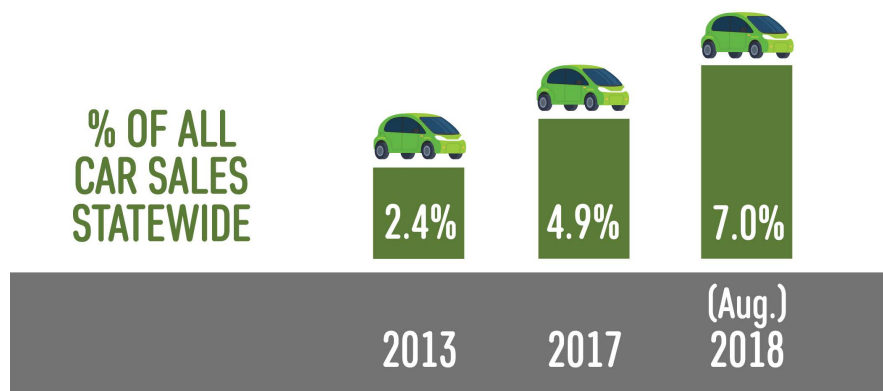
Published in November 2017, the Pathway is an integrated approach to reducing GHG emissions and air pollution by taking action in three major California economic sectors: electricity, transportation and buildings. It also represents a more cost-effective and feasible path among those being considered for addressing the state's clean energy and environmental goals.

Gov. Brown's executive order of January 2018 echoed a central plank of SCE's Pathway, which calls for 7 million electrified passenger vehicles and light-duty trucks by 2030. The Pathway also calls for electrifying more than 200,000 medium- and heavy-duty vehicles within the same timeframe.

While the targets differ slightly, the vision remains the same; a cleaner and healthier environment driven by widespread electric transportation.

EV SALES IN CALIFORNIA

Source: Auto Alliance's
Advanced Technology
Vehicle Sales Dashboard
(ATV Market Share, CA
only, BEV and PHEV only);
accessed November 2018



TAKE ACTION

Preparing for mass EV adoption will take contributions from both the private and public sector and collaboration across the region. The recommendations that follow can position local governments and their residents for success in this arena.

ACTION STEPS FOR LOCAL GOVERNMENTS

- #1 Prioritize EV adoption and development of charging infrastructure in land use planning and policies.
- #2 Use zoning, building codes, parking and signage policy and a streamlined permitting process to encourage EV adoption and accessibility.
- #3 Make use of well-attended, frequently used and municipally-owned property — parking lots, street parking, city buildings and offices, civic centers, libraries, schools — for publicly available EV parking and charging.
- #4 Electrify city or regional fleets by replacing gasoline-powered vehicles with EVs.
- #5 Mobilize existing communication channels to engage and educate local residents and businesses.
- #6 Leverage existing grant opportunities and other funding sources for EV readiness planning efforts.

#1: Prioritize EV adoption and development of charging infrastructure in land use planning and policies.

Incorporating an EV readiness strategy into your jurisdiction’s general plan, or local mobility, sustainability and climate action plans, is a foundational step, setting the stage for everything that follows. The city of Santa Monica’s Electric Vehicle Action Plan⁷ is frequently cited as a model.

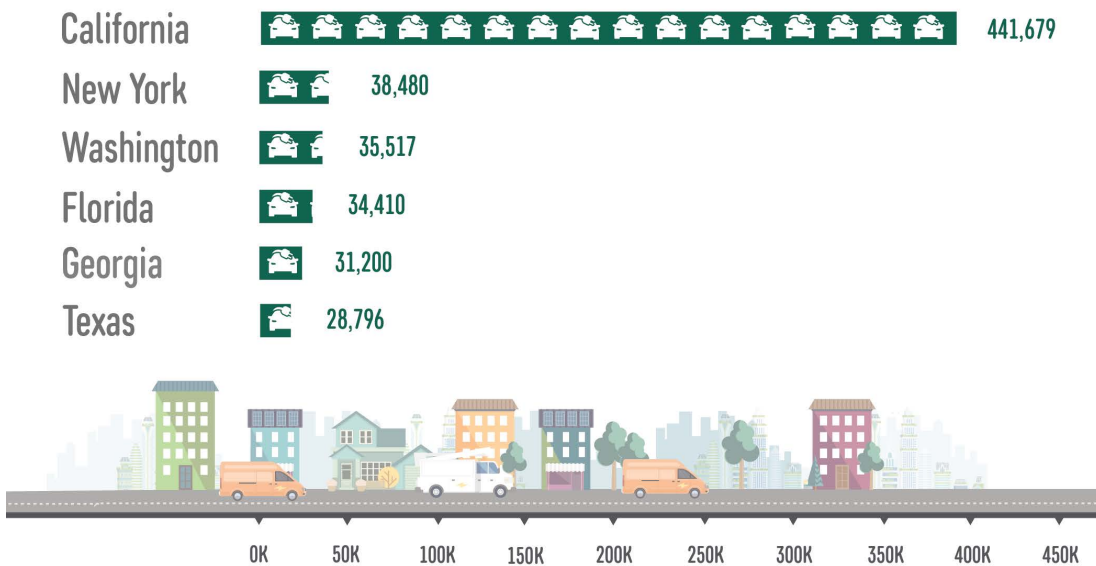
Parking-oriented land use analysis is vital to this process; understanding the distribution of parking spaces across land uses helps planners identify potential charging sites within their jurisdiction, and where the high-value charging opportunities may be located. It also enables them to anticipate the most popular daytime or nighttime hours for charging at these locations.

This will help utilities track changes in the electrical load over space and time to continue providing reliable service.⁸

Sub-regional planning organizations such as regional transportation planning agencies (RTPAs) and councils of government (COGs) can be valuable assets in these processes, especially in cases where no dedicated staff is available at the local level, by extending EV planning across groups of neighboring cities.⁹

One example is the collaboration between the San Bernardino Council of Governments and the San Bernardino County Transit Association, in jointly hiring a consultant to develop a county-wide Zero Emission Vehicle Readiness and Implementation Plan. The plan is being funded by a grant from the California Energy Commission (CEC).¹⁰

TOP STATES BY EV SALES
Jan. 2011- Aug. 2018



Source: Auto Alliance’s Advanced Technology Vehicle Sales Dashboard (ATV Market Sales, CA only, BEV and PHEV only); accessed December 2018



The city of Lynwood was the first to take part in SCE's Charge Ready program, having six EV charge ports installed for the city's new EV fleet. Photo: Jean Anderson

#2: Use zoning, building codes, parking and signage policy and streamlined permitting process to encourage EV adoption and accessibility.

Zoning is one of the most powerful tools that local governments can use to encourage certain types of development, and perhaps the most achievable among low-cost, high-value options for promoting EV readiness.

The goal of zoning for EVs should be to ensure that charging is an allowed land use (such as an accessory or a principal use) in as many types of zoning classifications as possible, including multifamily housing, commercial facilities and mixed-use development. Planners can also consider reducing parking requirements in exchange for installation of EV charging stations, or allowing EV charging spaces to count toward minimum parking requirements.¹¹

Building codes can encourage EV adoption, as recognized in the latest version of the Title 24 CalGreen Code. Cities also have the option of going above and beyond these requirements. By adopting more forward-looking building codes that require EV-ready wiring in new construction, jurisdictions can help meet future demand for charging, and reduce or eliminate the costs associated with future retrofitting.

EV-readiness building codes can also be used to ensure access to charging for multifamily building residents and people with disabilities. Requiring developers to run conduit, and to plan for and provide space for future electrical panels and/or transformers, is a relatively inexpensive way to ensure low-cost upgrades as the number of EVs grows.

The city of Lancaster has added requirements for electric vehicle charging stations into its building codes for new multifamily residential developments.

For example, for projects of 10 units or less, 20 percent of the total required parking spaces must be outfitted to allow for the future installation of charging stations; for projects of 10 units or more, the requirement applies to 10 percent of total required parking spaces. In both cases, charging stations must be provided in parking spaces for people with disabilities, in accordance with state requirements.¹²

Permitting can be a challenging process for property owners seeking to install EV charging infrastructure. State law requires that local governments take steps to expedite the permitting process.¹³ One way cities can expedite the process is by publishing a flyer that details their EV-specific design standards, especially local standards that may conflict with, or augment, state or national code requirements. This will help customers streamline the design and permitting process. Planning requirements could be relaxed to allow for electrical equipment placement in parking areas visible from public rights-of-way.

Some cities have designated a single point of contact to help permit applicants seeking to install EV chargers to navigate the process from end to end. This point of contact is knowledgeable on each step of the permitting process and can function as an ombudsman for the applicant. This helps both staff responsible for permit review as well as the applicant since this point of contact has a line of sight to the entire process. This person need not necessarily be a dedicated full-time employee. By expediting the permitting process, cities can remove a significant barrier to adoption for charging infrastructure.



Through the Charge Ready program, the city of Ontario installed more than 45 EV chargers throughout the city, including at the Ontario Convention Center (pictured). Photo: Paul Griffo

Also, local jurisdictions can use parking and signage policies to prompt timely turnover at charging stations, make stations more visible and easy to locate, and increase accessibility for drivers with disabilities.¹⁴

#3: Make use of well-attended, frequently used and municipally-owned property (parking lots, street parking, city buildings and offices, civic centers, libraries, and schools) for publicly available EV parking and charging.

This tactic is popular among local governments in SCE's service area. For example, the city of Lynwood was the first site in SCE's Charge Ready program, which helps public and private organizations within the utility's service area install electric vehicle charging stations. SCE installed six EV charging stations at Lynwood's city complex to accommodate a new EV fleet, and another eight stations in its civic center public parking lot for public use.¹⁵

Through the Charge Ready program, the city of Ontario installed more than 45 new EV chargers at seven key locations throughout the city, including the Ontario Convention Center, City Hall and the police station.¹⁶

Public transit parking lots can provide a convenient location for EV charging stations, allowing drivers to charge their vehicles while using public transportation for commuting or other travel. The city of Thousand Oaks partnered with the Ventura County Air Pollution Control District to fund and install the first DC Fast Charger in Ventura County at the Thousand Oaks Transportation Center. The center is a local transit hub for the Ventura-L.A. County region.¹⁷

Localities should also explore partnerships with businesses and organizations in high-density neighborhoods that are home to long-dwell parking locations, such as churches, gyms, shopping centers and movie theaters; both the public and private spaces are prime opportunities for making off-hours and overnight charging available to nearby residents.

To date, SCE's Charge Ready program, with its customers and partners, has installed more than 1,000 EV charging ports at more than 60 different sites, including workplaces, public parking lots, hospitals, destination centers and apartment and condominium complexes. Half of the charging stations are in communities that are most heavily impacted by the combined effects of economic, environmental and public health burdens (defined as "disadvantaged communities" by the state).



UPS aims to "lead the charge on electrification of medium-duty vehicles over the next five years," according to its 2017 Corporate Sustainability Progress Report. Photo: UPS

#4: Electrify city or regional fleets by replacing gasoline-powered vehicles with EVs.

For local governments that operate their own vehicle fleets, electrifying public and private fleets can help get residents and businesses interested in also making the shift. Fleet conversions can be included as medium- to long-term policy priorities as they will take time and resources.

Procurement decisions today, however, will impact California for generations to come, and it is therefore important that cities and municipalities plan for the shift to electric accordingly, and in partnership with electric utilities. This is critical to planning for infrastructure projects that can accommodate your long-term fleet plans.

Medium- and heavy-duty vehicles are the largest mobile sources of air pollution. Electrifying these classes of fleet vehicles is one method for making greater gains in air pollution reduction. Achieving the 2030 electrification goals for medium- and

heavy-duty vehicles as described in SCE's *Clean Power and Electrification Pathway* could reduce NOx emissions by a cumulative 6.7 tons per day.¹⁸

To manage upfront costs, some jurisdictions and transit agencies take phased approaches to fleet conversions, starting with passenger vehicles and working their way up to medium-duty vehicles like public works trucks. Cities are also looking at hybrid options like utility trucks with battery-powered onboard systems and equipment. In addition, some cities are pooling their purchasing power in order to negotiate better pricing with vehicle manufacturers.¹⁹

One example is the Climate Mayors Electric Vehicle Purchasing Collaborative, comprised of 17 U.S. cities (including Los Angeles, Long Beach, Santa Monica, San Diego and Chula Vista) and two counties.

Cities can look to the private sector for cues; private companies like UPS are creating a blueprint for fleet conversion, signing contracts with vendors such as Tesla, Workhorse and Thor Trucks as they aim to “lead the charge on electrification of medium-duty vehicles over the next five years.”²⁰

EV manufacturer Build Your Dreams (BYD) is successfully demonstrating electric forklifts, garbage trucks and big rigs to public agencies in California, with plans to introduce additional electric fleet vehicles in the near future, like electric street sweepers.

As fleet purchases are a recurring item in a city or county's budget, EV options could be considered a minor-to-moderate incremental cost. In assessing cost-effectiveness, EVs routinely offer lower lifetime operating costs than their diesel counterparts, based on lower fuel and maintenance expenses.



Foothill Transit established the first fast-charge electric bus line in the U.S. in 2014 and plans to complete fleet electrification by 2030. Photo: Foothill Transit

One of California's most successful examples of green bus fleets is Foothill Transit, serving an area that stretches from downtown Los Angeles to the San Gabriel and Pomona valleys to southwest San Bernardino County. In 2014, Foothill Transit established the first fast-charge electric bus line in the United States. To date, 10 percent of its fleet is electrified, and the agency plans for complete fleet electrification by 2030.²¹

Local governments across the nation are turning to electric buses to confront air quality issues and reduce fleet operating costs. Options such as battery leasing, joint procurement and bus sharing are emerging to make upfront costs for electric buses more manageable.²²

#5: Mobilize existing communication channels to engage and educate local residents and businesses.

Local jurisdictions can provide information to their constituents on vehicle types, potential cost savings from EV driving, electrical service and the charging equipment installation process, using such simple tools as a website and/or handouts from utilities or the Building Department.

They can also host workshops for general or targeted audiences such as drivers, homeowner associations (HOAs), property owners/managers and renters for residential charging; or for employees, employers, fleet managers or retailers for non-residential charging. The workshops can address all of the major EV readiness elements such as permitting and inspection, zoning and parking and building codes.



Actively engaging large employers or property owners in the decision-making process or providing information specific to their needs can facilitate the installation of charging stations and use of EVs at their site as the market matures.

Plug In Santa Barbara is a useful example of local consumer outreach in Santa Barbara County. Supported by a group of cities, businesses and utilities, Plug In Santa Barbara is a one-stop resource for local plug-in electric car buyers, with information on all the new models, home charging, charging rates, government incentives, permitting requirements and the benefits of connecting solar electric systems into charging facilities.²³

#6: Leverage existing grant opportunities and other funding sources for EV readiness planning.

Agencies like the U.S. Department of Energy and the California Energy Commission have made funding available for local and regional EV readiness planning efforts.



Charging stations in South El Monte. To date, SCE's Charge Ready program, with its customers and partners, has installed more than 1,000 EV charging ports at more than 60 different sites. Photo: Maria Hedrick.

Tracking and applying for these grant opportunities can help local government entities proactively plan for the deployment of charging infrastructure.

In May 2018, the CEC awarded nine cities and organizations nearly \$1.8 million through its Alternative and Renewable Fuel and Vehicle Technology Program. This program develops strategic plans outlining an approach to expand electric vehicle charging access.

In Southern California, the award recipients included the city of Long Beach Harbor Department, the County of Los Angeles, and the Ventura County Regional Energy Alliance. These three local efforts will focus on developing a blueprint for building out the region's EV charging infrastructure, and will be better positioned for funding of shovel-ready demonstration programs and pilots.²⁴

Here's an added benefit of incorporating an EV readiness strategy into local planning; the results of due diligence will often come in handy when applying for transportation grants. Instead of starting from scratch, the content of an EV readiness strategy will be valuable in completing those grant applications in a timely manner, with a reduced impact on staff resources.

WORKING TOGETHER

Local governments know their communities better than any other stakeholder group. It is important for jurisdictions to share their insights with state-level policymakers to help ensure that statewide policies and programs meet the needs of diverse communities. Those who share this vision of a healthier, clean energy future should unite their voices to share support for these policies and principles:

Fund vehicle charging infrastructure pilots and deployments: California will need more than 250,000 away-from-home charging ports by 2025 to sufficiently support EV growth to reach 5-7 million EVs on the road by 2030.²⁵ Funding is needed to enable utilities and charging companies to rapidly deploy more infrastructure and chargers, including adequate charging infrastructure for medium and heavy-duty trucks.

- *Use your voice to support public and private investment*, including utility programs, to build and expand vehicle charging and fueling infrastructure for workplaces, public spaces and residences, including multi-unit dwellings, especially in disadvantaged communities.

Support the extension of rebates and incentives: Federal, state and local rebates and tax credits should be extended to make EVs accessible to people of all income levels. For example, the state offers a rebate of up to \$2,500 to new EV purchasers with low and moderate incomes;²⁶ however, these rebates often have waiting lists because they use an inconsistent annual funding source. SCE's Clean Fuel Rewards program offers \$1,000 rebates on new and used EVs purchased or leased after Jan. 1, 2019 (\$450 for new and used EVs purchased or leased before then); the rebates are funded by California's Low Carbon Fuel Standard program.²⁷

- *Support durable, predictable incentives* for the state rebate and federal tax credit that lower EV purchase prices and encourage buyers to choose EVs at the end of their gasoline-powered vehicles' 11-year life cycles. Healthier incentives are also needed to encourage businesses to switch to electricity as a fuel for buses and intermodal trucks with 18-year average life spans.

Keep electricity affordable: Customer adoption of electrified solutions depends on electricity remaining an affordable alternative to fossil fuels. The cost of supplying clean energy should be allocated fairly across all customer groups. Policies that ensure this fairness will help to keep electricity affordable.

- *Support California's GHG cap-and-trade program:* This market-based program helps ensure that electricity remains affordable and competitive with fossil fuels during the transition to the clean energy future.

- *Ensure that the cleanest available technologies benefit all communities*, including low-income and other disadvantaged communities, which are among the most impacted by pollution.²⁸

Encourage collaboration among stakeholders: Widespread electrification of transportation will rely on sustainable policies and collaboration between vehicle manufacturers, charging companies, policymakers and electric utilities on issues such as charging standards and consumer awareness.²⁹

- *Support these and even broader collaboration efforts* among utilities, state and local regulators and legislators, renewable energy providers, public health advocates, community, environmental, and ratepayer advocacy groups, business organizations, consumers and more.

SCE can assist with reviewing potential sites for EV charging, conducting an initial fleet analysis, or help with EV options, benefits and funding opportunities.

Please call your SCE Account Manager or 1-800-990-7788. Find more information at [sce.com/TE](https://www.sce.com/TE).

REFERENCES

1. Veloz.org, November 2018 Sales Dashboard, accessed Dec. 19, 2018. http://www.veloz.org/wp-content/uploads/2018/12/11_nov_2018_Dashboard_PEV_Sales_veloz.pdf. Data aggregated from www.hybridcars.com and www.insideevs.com.
2. Alliance of Auto Manufacturers, Advanced Technology Vehicles Sales Dashboard | Data compiled by Alliance of Auto Manufacturers using information provided by IHS Markit, accessed Nov. 28, 2018, via <http://evadoption.com/ev-market-share/ev-market-share-state/>.
3. Alliance of Auto Manufacturers, Advanced Technology Vehicles Sales Dashboard, accessed Nov. 26, 2018 (ATV Market Share, CA only, BEV and PHEV only).
4. California Air Resources Board, California Greenhouse Gas Emission Inventory, 2018 Edition webpage, last reviewed July 11, 2018, accessed Dec. 3, 2018 (see chart titled "Emissions by Economic Sector"). <https://www.arb.ca.gov/cc/inventory/data/data.htm>
5. Edmund G. Brown, Executive Order B-48-18, issued Jan. 26, 2018; accessed Nov. 26, 2018. <https://www.gov.ca.gov/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/>
6. California Public Utilities Commission, "Summary of Decision on Transportation Electrification Program Proposals from the Investor-Owned Utilities, May 31, 2018," accessed Nov. 26, 2018. <http://www.cpsc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457607>
7. Garrett Wong, Sr., Ariana Vito, City of Santa Monica; Santa Monica Electric Vehicle Action Plan, adopted Nov. 17, 2017, accessed Dec. 4, 2018. https://www.smgov.net/uploadedFiles/Departments/OSE/Categories/Energy/EVAP_Final_Draft_WEB.pdf
8. Ben Rubin OPR, State of California's Office of Planning and Research; Zero-Emission Vehicles in California: Community Readiness Guidebook, 2013, Pg. 32. http://opr.ca.gov/docs/ZEV_Guidebook.pdf
9. J.R. DeShazo, Ayala Ben-Yehuda, Norman Wong, Alex Turek, UCLA Luskin Center for Innovation; South Bay Cities Plug-In Electric Vehicle Deployment Plan, prepared for the Southern California Association of Governments, June 2013. Pg. 2. <http://innovation.luskin.ucla.edu/sites/default/files/South%20Bay%20Plan.pdf>
10. California Energy Commission, Notice of Proposed Awards (Revised), Alternative and Renewable Fuel and Vehicle Technology Program Grant Solicitation, GFO-16-601, Zero Emission Vehicle Regional Readiness and Planning Solicitation, March 8, 2017. https://www.energy.ca.gov/contracts/GFO-16-601_NOPA_Revised.pdf
11. Zero-Emission Vehicles in California: Community Readiness Guidebook, 2013 (see above), Pg. 129.
12. City of Lancaster (CA), Code of Ordinances; Article V, Solar, Wind and Alternative Energy Uses; 17.08.330 - Electric Vehicle Charging Stations (Ord. No. 989, § 1, 4-9-2013); accessed Nov. 28, 2018. https://library.municode.com/ca/lancaster/codes/code_of_ordinances?nodeId=TIT17ZO_CH17.08REZO_ARTVSOWIALENUS_17.08.330ELVECHST
13. David Chiu, member, California State Assembly; Assembly Bill No. 1236, Chapter 598, Item 2g, 2015. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB1236
14. "South Bay Cities Plug-In Electric Vehicle Deployment Plan," June 2013, (see above), Pg. 6. <http://innovation.luskin.ucla.edu/sites/default/files/South%20Bay%20Plan.pdf>
15. Paul Griffo, Southern California Edison, "SCE Files Plan to Expand Charge Ready EV Charging Program," June 26, 2018. <https://energized.edison.com/stories/sce-files-plan-to-expand-charge-ready-ev-charging-program>
16. Paul Griffo, Southern California Edison, "Charge Ready: Ontario Gets Charged Up in Time for National Drive Electric Week," Sep. 11, 2017. <https://energized.edison.com/stories/charge-ready-ontario-gets-charged-up-in-time-for-national-drive-electric-week>
17. Zero-Emission Vehicles in California: Community Readiness Guidebook, 2013 (see above), Pg. 54. http://opr.ca.gov/docs/ZEV_Guidebook.pdf
18. California Transportation Electrification Assessment, Phase 1: Final Report, supra, light-duty (Table 37, p. 69); heavy-duty (Table 49, p. 80), and upstream fuel emission factors (Table 32, p. 65). The analysis compares net NOx reductions per megajoule from electrifying a light-duty vehicle and heavy-duty vehicle with the NOx reductions per megajoule from the addition of zero-emission renewable energy or energy efficiency. The heavy-duty NOx reductions can vary widely by the type of vehicle (e.g., small truck, large truck, transit bus) and efficiency. These NOx numbers are conservative because they include out-of-basin NOx emissions from power plants. http://www.caletc.com/wp-content/uploads/2016/08/CalETC_TEA_Phase_1-FINAL_Updated_092014.pdf
19. Electrification Coalition, "EC Launches Climate Mayors Electric Vehicle Purchasing Collaborative," Sep. 11, 2018. <https://www.electrificationcoalition.org/electrification-coalition/>
20. Greenbiz, "2018 Verge Vanguard Awards: Logistics Leader, UPS Atlanta," Sep. 17, 2018. <https://www.greenbiz.com/article/2018-verge-vanguard-awards>. Also, UPS, "On the Leading Edge: UPS 2017 Corporate Sustainability Progress Report," p. 56. <https://sustainability.ups.com/media/ups-pdf-interactive-2017/index.html>
21. Foothill Transit web site, "Electric Program" page. <http://foothilltransit.org/news/sustainability/electric-program/>
22. C40 Cities, "C40 Blog: C40 Cities Work Together to Invest in Clean Buses," May 11, 2017. https://www.c40.org/blog_posts/c40-cities-work-together-to-invest-in-clean-buses
23. Zero-Emission Vehicles in California: Community Readiness Guidebook, 2013 (see above), Pg. 76. http://opr.ca.gov/docs/ZEV_Guidebook.pdf
24. Skip Descant, Future Structure, "California Cities Receive Funding to Develop EV Charging Infrastructure Plans," June 1, 2018. <http://www.govtech.com/fs/California-Cities-Receive-Funding-to-Develop-EV-Charging-Infrastructure-Plans.html>
25. California Energy Commission, "California Plug-In Electric Vehicle Infrastructure Projections: 2017-2025", March 2018, accessed Dec. 3, 2018. <https://www.nrel.gov/docs/fy18osti/70893.pdf>
26. California Clean Vehicle Rebate Project, administered by the Center for Sustainable Energy for the California Air Resources Board, "For Public Fleets" web page, accessed Dec. 4, 2018. <https://cleanvehiclerebate.org/eng/fleet>
27. Julia Roether, Southern California Edison, "Driving an Electric Vehicle is More Affordable than Ever," Nov. 29, 2018. <https://energized.edison.com/stories/driving-an-electric-vehicle-is-more-affordable-than-ever>
28. California's Office of Environmental Health Hazard Assessment (OEHHA), "SB 535 Disadvantaged Communities." <https://oehha.ca.gov/calenviroscreen/sb535>
29. Southern California Edison, "Transportation Electrification: Reducing Emissions, Driving Innovation," pp. 8-9, last modified January 2017, accessed Oct. 12, 2017. https://newsroom.edison.com/internal_redirect/cms.ipressroom.com.s3.amazonaws.com/166/files/20189/201701-transportation-electrification-reducing-emissions-driving%20innovation.pdf