



TO: Mayor and Councilmembers

SUBMITTED BY: Peter Imhof, Planning and Environmental Review Director

PREPARED BY: Dana Murray, Sustainability Manager
Angeline Foshay, Management Analyst

SUBJECT: Ordinance Amending Chapter 15.12 of the Goleta Municipal Code to Adopt an Electric Vehicle Reach Code

RECOMMENDATION:

Introduce and conduct the first reading by title only, waiving further reading of Ordinance No. 24-__ entitled, “An Ordinance of the City Council of the City of Goleta, California, Amending Chapter 15.12 Entitled “Green Building Code” of the Goleta Municipal Code To Adopt the 2022 Edition of the California Building and Energy Code and Local Amendments thereto (“REACH Code”) and Determine the Ordinance to Be Exempt From the California Environmental Quality Act.”

BACKGROUND:

Investing in the development and installation of Electric Vehicle (EV) charging infrastructure is identified in the City’s budget priorities and Strategic Plan as a means of supporting environmental vitality and the City’s transition to a clean energy future. Additionally, ‘Developing an Electrical Vehicle Infrastructure Reach Code’ is a top priority in the City’s adopted Planning & Environmental Review Department’s FY 2023-24 Annual Work Program. The City Council adopted an EV Charging Station Permit Streamlining Ordinance in April 2020.

In September 2020, Governor Newsom issued an Executive Order requiring sales of all new passenger vehicles to be zero-emission by 2035 and additional measures to eliminate harmful emissions from the transportation sector. The Executive Order directs the California Air Resources Board (CARB), California Energy Commission (CEC), California Public Utilities Commission, other State agencies, and local agencies to accelerate deployment of affordable fueling and charging options for zero-emission vehicles (ZEVs) in ways that serve all communities, and specifically low-income and disadvantaged communities.

Transportation accounts for just over half of the greenhouse gas (GHG) emissions in Santa Barbara County. One of the key strategies to reduce emissions and meet the

ambitious climate goals of the State is encouraging the use of EVs and expanding EV charging infrastructure. The most common barrier to switching to an EV, especially for residents of multifamily buildings, is the lack of access to reliable charging at the home or workplace. Requiring EV charging infrastructure in new buildings is a significant way to support the transition to EVs and is significantly less expensive than future retrofits to add EV charging.

California has a goal to install 250,000 EV chargers to support 1.5 million ZEVs by 2025 and infrastructure to support 5 million ZEVs by 2030. To meet future EV demand along the Central Coast, it is estimated that an additional 25,481 public Level 2 EV charging stations will be required by 2030, as well as an additional 1,223 public Direct Current Fast Charging (DCFC) charging stations. 12,418 of those chargers would be needed within Santa Barbara County, according to the Santa Barbara County Association of Government's (SBCAG) Central Coast Zero Emission Vehicle Strategy (Draft, April 2023). CEC's estimated projection of the number of public Level 2 EV charging stations needed to support the interim 2025 ZEV goal is 972 chargers in Santa Barbara County.

To meet the growing need for access to EV chargers, local jurisdictions often adopt "Reach Codes" to increase the number of EV charging spaces required in new development, particularly related to multifamily buildings. A Reach Code is a local Building Energy Code that "reaches" beyond the state minimum requirements for energy use in building design and construction, creating opportunities for local governments to lead beyond state requirements. Reach Codes help encourage development of energy efficient and increasingly electrified, sustainable buildings as well as support EV adoption through EV charging standards. The 2022 California Building Standards Code (CBSC) included increased EV charging requirements compared to previous code cycles, but it does not go far enough to significantly improve access to EV charging, given the pace of transition needed to meet state goals and meaningfully address the climate crisis. Most of the buildings built in or after 2023 will continue to exist in 2035, and these EVs will need a place to charge. The State recently developed and adopted adjustments to their Building Codes and Standards in between the three-year adoption cycle, known as intervening cycle changes, which are described in the Discussion section below and take effect on July 1, 2024.

More than 44 local governments in California have adopted EV Reach Codes. These jurisdictions have increased EV infrastructure requirements in their Building Codes to help provide critical EV charging infrastructure for residences and workplaces. EV Reach Codes help jurisdictions meet the growing gap in EV charging demand and availability. Adopting a Reach Code component that addresses EV charging infrastructure will help Goleta further electrify our transportation sector, which accounts for over 55% of the City's emissions. With bold EV adoption and infrastructure goals set by the state, Goleta can further support the transportation electrification transition by increasing the minimum requirements for EV infrastructure in new construction.

As of April 2024, there are about 90 privately-owned public chargers currently within Goleta and the City is actively expanding the public charging network, but the City will not be able to support the level of EV charging infrastructure needed without significant

increases in EV chargers in multifamily residential and non-residential projects. During the development of Goleta's New Zoning Ordinance (NZO), adopted in April 2020, EV charging requirements were added to Title 17 to support transportation electrification in residential, office and lodging for designated uses. These requirements have helped Goleta secure better EV charging infrastructure in multi-family developments, but stronger regulations can support further EV adoption.

To help achieve GHG emission reductions and EV goals, and in acknowledgement of the existing gaps in local EV charging infrastructure, staff introduced research and background on this issue at the October 12, 2022, Green Committee meeting. The Committee recommended that staff research different avenues of incorporating EV charger requirements into a City Reach Code. An "EV Charger Reach Code" would involve the City passing an amendment to CALGreen to require new projects increase the number of EV charging spaces, helping to ensure that current and future EV drivers have a spot to plug in, particularly in new multifamily buildings. At the Green Committee meeting on September 28, 2023, Committee members directed staff to investigate developing a model code similar to those adopted by Bay Area jurisdictions and recommended by Central Coast Community Choice Energy (3CE), focusing on maximizing EV charging access for multifamily residential buildings, hotels, and offices. Staff partnered with technical consultants from 3CE and Southern California Edison (SCE) to develop an ordinance that balances the Committee's policy requests, streamlines implementation for the Planning and Environmental Review's Building & Safety Division, advances the City's support for EV infrastructure, and reflects feedback from the community.

DISCUSSION:

The State develops and adopts adjustments to Building Codes and Standards in between the regular three-year adoption cycle, known as intervening cycle changes. 2024 intervening cycle changes for the 2022 California Building Code and Standards include adjustments to CALGreen for multifamily, hotel, motel, and nonresidential EV charging requirements. All jurisdictions are required to automatically adhere to the Intervening Code Adoption Cycle versions of Title 24 on July 1, 2024.

The City typically adopts the State's Energy and Building Code or the "Green Building Code" with local amendments. The proposed ordinance would amend Chapter 15.12 entitled "Green Building Code" of the Goleta Municipal Code to adopt the latest State's Green Building Code and local amendments that will constitute Goleta's Reach Code. The current Chapter 15.12 Green Building Code contains the current 2022 building code provisions and language from the City's "Green Building Program," adopted in 2012 via Ordinance 12-13. The previous language from the Green Building Program, while at the time was advanced, has been far surpassed in applicability and sustainable regulation by the base California Building Code. Staff has worked with technical consultants to develop an EV Reach Code ordinance that is up to date with information from the State on the 2022 intervening code, and proposes to implement the Reach Code in concert with the intervening code's July 1, 2024 effective date.

Single-family Residential

There were no changes in the intervening cycle code to the single-family residential building EV requirements. The base requirements in the code are that new single-family homes be EV capable with service panel or subpanel capacity. Staff recommends adopting a simple Reach Code for single-family residential, requiring one Level 2 EV Charging Receptacle and one Level 1 EV Charging Receptacle. This expands upon the minimum 2022 CBSC requirement of one Level 2 EV Capable circuit for one parking space per dwelling unit.

Multifamily Residential

Prioritizing access to EV chargers in multifamily residential is essential to supporting the transition to EVs in the Goleta community.

For multifamily parking facilities with assigned parking, where dwelling units are provided with assigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an assigned parking space for each dwelling unit. Where the total number of dwelling units exceeds the number of assigned parking spaces, all assigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.

For multifamily parking facilities with unassigned or common use parking, where dwelling units are provided with unassigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an unassigned parking space for each dwelling unit. Where the total number of dwelling units exceeds the number of unassigned parking spaces, all unassigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.

Where dwelling units are provided with both assigned and unassigned parking spaces, at least one low power Level 2 EV charging receptacle shall be provided for each dwelling unit at either the assigned or unassigned parking space, but not required for both.

Additionally, for multifamily parking facilities with unassigned or common use parking, 25% of unassigned or common use parking spaces shall also be equipped with Level 2 EV chargers and shall be made available for use by all residents or guests.

Hotels and Motels

Green Committee members expressed an interest in expanding charging access at hotels in Goleta to accommodate travelers and visitors to the region. Under the proposed ordinance for new hotels and motels, 40% of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. Additionally, 25% of the total number of parking spaces shall be equipped with Level 2 EV chargers.

Nonresidential Development

For nonresidential development, focusing on developing workplace charging can help support commuters who may be traveling long distances to work or who may not have access to charging at home. Workplace charging also shifts electric usage towards maximum daylight hours which aligns with solar power generation, meaning energy is being used when it is at its cleanest. This also enables less load being added at peak demand times later in the day when solar power generation is going offline.

The proposed ordinance would require the following of new nonresidential development by parking spaces:

| <u>FACILITY TYPE</u> | <u>NUMBER OF REQUIRED EV CAPABLE OR EVCS SPACES</u> | <u>NUMBER OF REQUIRED EV CAPABLE SPACES¹</u> | <u>NUMBER OF REQUIRED EVCS^{1,2}</u> |
|----------------------|---|---|--|
| Office & Retail | 45% of actual parking spaces | 11% of actual parking spaces | 34% of actual parking spaces |
| All Other | 45% of actual parking spaces | 22% of actual parking spaces | 23% of actual parking spaces |

The proposed ordinance would require the following of new nonresidential development via the code’s power allocation method:

| <u>FACILITY TYPE</u> | <u>MINIMUM TOTAL kVA @ 6.6 kVA¹</u> | <u>MAXIMUM kVA ALLOWED FOR EV CAPABLE SPACES^{1, 2}</u> | <u>MINIMUM kVA REQUIRED IN ANY COMBINATION OF LOW POWER LEVEL 2, LEVEL 2, OR DCFC^{1, 3,}</u> |
|----------------------------|--|---|---|
| Office & Retail | 45% of actual parking spaces x 6.6 | 11% of actual parking spaces x 6.6 | 34% of actual parking spaces x 6.6 |
| All Other | 45% of actual parking spaces x 6.6 | 22% of actual parking spaces x 6.6 | 23% of actual parking spaces x 6.6 |

Existing Buildings

In select circumstances, these regulations can apply to existing buildings. Most of these are already required by the 2022 Building Code, except for the indicated reach code addition below:

- When the scope of construction work includes an increase or alteration to power supply to an electric service panel as part of a parking facility addition or alteration.
- When a new photovoltaic system is installed covering existing parking spaces.
- When additions or alterations to existing buildings are triggered pursuant to code Section 301.1 and the scope of work includes an increase in power supply to an electric service panel.

- **Reach Code:** Addition of parking facilities or alterations that include breaking ground on existing parking surfaces. Green Building Code Section 301.1.1 states what is considered an alteration of an existing parking surface.

Exceptions

Exceptions to the applicability of the Reach Code are on a case-by-case basis. An exception may be granted in the case of infeasibility due to the following conditions:

- Where there is no local utility power supply.
- Where the local utility is unable to supply adequate power.
- Where there is evidence suitable to the local enforcement agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4.3, may increase construction cost by an average of \$4,500 per parking space. EV infrastructure shall be provided up to the level that would not exceed this cost for utility service. This is an adjustment to the 2022 Intervening Code that stipulates that an exception may be granted where there is “an adverse impact to the construction cost,” which staff suggests the City Council define to mean construction costs to exceed \$4,500 per parking space. Providing an exact number for evaluation of cost impacts reduces ambiguity for building staff when evaluating projects and enforcing the applicability of EV provisions. Technical experts with TRC identified the \$4,500 threshold by evaluating utility cost-estimates borne by the developer per EV space. Estimated additional impacts to developers per space can be as follows:
 - a) \$0 due to SCE Rule 29 in a situation with a ‘common load’ EV meter, or
 - b) \$100-\$500/space if the EV spaces are on dwelling unit electrical meters (based on some analysis from this 2019 Energy Solutions study and PG&E’s Unit Cost Guide), or
 - c) More than \$500/space if there are unique local requirements regarding electrical infrastructure (such as undergrounding transformers).
- Where demonstrated as impracticable excluding local utility service or utility infrastructure issues.
- Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities and without electrical panel upgrade or new panel installation. Detached ADUs, attached ADUs, and JADUs without additional parking but with electrical panel upgrades or new panels must have reserved breakers and electrical capacity according to the requirements of 4.106.4.1.

Additional exceptions may be granted in the case of remote parking facilities that do not have access to a building service panel, in the parking area lighting upgrades where no trenching is part of the scope of work, and during emergency repairs, including but not limited to water line break in parking facilities, or natural disaster repairs.

Outreach

The City received public comment on EV Reach Codes at three public meetings of the Council's standing Committee on Energy and Green issues, in October 2022, September 2023, and January 2024. Public comments received at these meetings supported the City's development of an EV Reach Code, with an emphasis on the City requiring more EV chargers at multifamily properties and workplaces, in particular. Support for workplace charging was emphasized as a solution to reduce emissions for long distance commuters and provide charging access to those who may not have it in their residence. Given policy options, members of the public urged the City to go with the options that required the most EV chargers installed at the time of construction, in addition to requiring electric work capable of supporting future EV chargers.

In addition to the public meetings of the Green Committee, the City held a public webinar/workshop for the community. Goleta's virtual EV Reach Code Lunch & Learn was hosted on February 28, 2024, featuring a panel of technical experts from 3CE, TRC, SCE, and the City. City staff and technical experts shared information about the City's potential EV Reach Code, including background information about Reach Codes, EV Charger technology and terminology, and existing mandatory state requirements, followed by a Q&A session with the panel. Over 40 people had registered for the event, with about 19 community members in attendance from a variety of backgrounds, including residents, environmental nonprofits, developers, Chamber of Commerce staff, business owners, and representatives from other local jurisdictions. Feedback during the Q&A included comments and questions related to EV charger speed preferences, grid reliability and capacity for additional electricity requirements, interest in getting EV chargers at existing multifamily residential properties, and specifics for non-residential new construction and businesses.

GOLETA STRATEGIC PLAN:

City-Wide Strategy: 1. Support Environmental Vitality

Strategic Goal:

- **1.1.3.** Encourage renewable energy generation and use through installation of solar panels, battery energy storage, electric vehicle charging stations and similar measures
- **1.1.4.** Adopt a "Reach" Building Code

FISCAL IMPACTS:

There are no fiscal impacts related to this item.

ALTERNATIVES:

The City Council may elect to not adopt the proposed ordinance, which would mean that only the requirements in the State's 2022 Building and Energy Code would apply to the City on July 1, 2024, and the City would not have a Reach Code.

LEGAL REVIEW BY: Megan Garibaldi, City Attorney

APPROVED BY: Robert Nisbet, City Manager

ATTACHMENTS:

1. Ordinance No. 24-__ entitled, "An Ordinance of the City Council of the City of Goleta, California, Amending Chapter 15.12 Entitled "Green Building Code" of the Goleta Municipal Code To Adopt the 2022 Edition of the California Building and Energy Code and Local Amendments thereto and Determine the Ordinance to Be Exempt From the California Environmental Quality Act."
2. Definitions Reference Document
3. Staff "Electric Vehicle Reach Code" PowerPoint Presentation