AGENDA
ENERGY / GREEN ISSUES
STANDING COMMITTEE MEETING

Wednesday, October 12, 2022
9:00 A.M. – 10:30 AM

City Hall
130 Cremona Drive, Suite B
Goleta, California

This Virtual Meeting is held pursuant to AB361.
The meeting will be Virtual because meeting in person would present imminent risks to the health or safety of attendees.

Paula Perotte, Mayor
Kyle Richards, Councilmember
Robert Nisbet, City Manager
Peter Imhof, Planning and Environmental Review Director
Dana Murray, Sustainability Manager
Angeline Foshay, Sustainability Management Assistant
Stephanie Holmes, CivicSpark Climate Fellow

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IMPORTANT NOTICE REGARDING DATE
ENERGY / GREEN ISSUES STANDING COMMITTEE MEETING
This Virtual Meeting is held pursuant to AB361. The meeting will be Virtual because meeting in person would present imminent risks to the health or safety of attendees.
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Public Participation

If you wish to make a general public comment or to comment on a specific agenda item, the following methods are available:

Distribution to the Energy / Green Issues Standing Committee - Submit your comment via email prior to 12:00 PM on the Tuesday prior to the Energy / Green Issues Standing Committee meeting. Please submit your comment to Dana Murray at:

dmurray@cityofgoleta.org. Your comment will be placed into the record and distributed appropriately.

Please register for the Energy / Green Issues Standing Committee Meeting on October 12, 2022, 9:00 AM PDT at:

ELECTRONIC PARTICIPATION:

Zoom Registration Link:
https://us06web.zoom.us/webinar/register/WN_jZk0tO93S9yoi-kqSnos4g

Zoom Webinar ID: 823 1503 3713

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After registering, you will receive a confirmation email containing information about joining the webinar.

You will be connected to audio using your computer's microphone and speakers (VoIP). A headset is recommended.

Oral comments during a meeting may be made by electronic participation only.

AGENDA

I. Public Comment (5 minutes)

II. EV Charging – City Hall SCE Charge Ready (30 minutes)
a. Recommendation Request

III. Clean Fleet Transition (General Services) (20 minutes)

IV. Reach Code & Building Electrification (30 minutes)

a. Recommendation Request

V. Program Updates / Next Regularly Scheduled Quarterly Energy / Green Issues Committee Meeting (5 minutes)

a. Date TBD – Currently December 21, 2022; 2:30 PM – 4:00 PM

Note: In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, (including assisted listening devices), please contact Deborah Lopez, City Clerk, at (805) 961-7505 at least 72 hours prior to the meeting. Notification helps to ensure that reasonable arrangements can be made to provide accessibility to the meeting.

MEMORANDUM

DATE: October 6, 2022

TO: Energy and Green Issues Standing Committee

FROM: Peter Imhof, Planning and Environmental Review Director
Dana Murray, Sustainability Manager
Angeline Foshay, Sustainability Management Assistant
Stephanie Holmes, CivicSpark Climate Fellow
Matthew Fore, General Services Director
Cassidy Le Air, Management Analyst

SUBJECT: Background Information for the October 12, 2022 Energy / Green Issues Standing Committee Meeting (please see attached agenda)

ITEM II: CITY HALL EV CHARGING – SCE CHARGE READY PROGRAM

The purpose of this item is to provide an update to the Energy / Green Issues Standing Committee (the Committee) on the status of the City's application to participate in SCE's Charge Ready Program, which would facilitate deployment of 9 electric vehicle (EV) charging stations, including 17 ports; seek a revised recommendation from the Committee, given the cost increase since the Committee's March recommendation; and receive feedback from the Committee on next steps given certain key considerations identified below.

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 supporting the City's transition to a clean energy future. Additionally, 'Electrical Vehicle Readiness Planning' is a top priority in the City's adopted Planning & Environmental Review Department's Annual Work Program for FY 22/23. The City Council adopted an Electric Vehicle 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. Transportation accounts for just over half of the greenhouse gas (GHG) emissions in Santa Barbara County. One of the key strategies to reducing emissions and meeting the ambitious climate goals of the State is encouraging the use of EVs and expanding EV charging infrastructure. 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 in low-income and disadvantaged communities.

California has a statewide goal to install 250,000 EV chargers to support 1.5 million ZEVs by 2025 and infrastructure to support 5 million ZEVs by 2030. Based on information provided by the Santa Barbara County Air Pollution Control District, the CEC estimates that jurisdictions within Santa Barbara County will need to support an additional 10,333 EVs by 2025. Supporting that number of EVs by 2025 requires significant investment in public Level 2 EV chargers, which are characterized by a 208-240 Volt, 40 Amp circuit and can deliver on average 7.6 kW of power. CEC's estimated projection of the number of public Level 2 EV charging stations needed to support the 2025 ZEV goal is 972 chargers in Santa Barbara County. The total number of public Level 2 EV charging stations in the County as of January 31, 2022 is 328, leaving an EV charging station gap of 644 to meet CEC's 2025 ZEV projection over the next few years.

To help achieve EV goals and in acknowledgement of the existing gaps in local EV charging infrastructure, over the last year Sustainability Program staff has been pursuing various funding opportunities to offset the costs of installing EV charging stations at City facilities. Staff has submitted applications to the Southern California Edison (SCE) Charge Ready Program, the CEC's CALeVIP Program, the VW Light Duty EV Infrastructure Program, and the Santa Barbara County Air Pollution Control District's Clean Air Grants Infrastructure Program. Additionally, EV-capable conduits have been installed as part of the solar photovoltaic project at City Hall to allow for easy installation of at least three dual port EV chargers providing six public EV spaces. Of the programs applied to, the City was selected to participate in SCE's Charge Ready Program.

SCE's Charge Ready Program assists property owners, including local jurisdictions, with deploying the infrastructure and equipment necessary to support EV charging stations. Specifically designed for light-duty passenger vehicles, the program helps cities by providing financial incentives, infrastructure, and technical support to facilitate the installation and maintenance of EV chargers. The Charge Ready Program is a "make ready" program, in which SCE provides program-funded infrastructure upgrades (e.g., underground conduit, wiring and stub-outs needed to install EV chargers), as well as an incentive for the purchase of new EV charging stations. Once enrolled in Charge Ready, the City is responsible for the purchase and installation of the EV charging stations, to be selected from SCE's approved product list. The terms of the program include an easement for the installation of electrical equipment, SCE access to EV charger use data,

and EV charger participation in SCE's future demand response events. These "demand response events" essentially scale back charging when the need and cost of energy is high during peak demand hours and are part of local grid resiliency efforts. Additionally, the City would be responsible for maintenance, operation and networking of all installed chargers for a minimum of 10 years to ensure equipment is in good working order.

During the February and March 2022 Green Committee meetings, staff solicited feedback on the proposed conceptual design. The Committee reviewed SCE's conceptual design and recommended pursuing participation in SCE's Charge Ready Program. Staff presented an option to increase the number of charging ports in the conceptual design from 12 to 17, with the Committee recommending 17 EV ports that would extend further east along the southern stretch of parking spaces outside of City Hall. Key discussion points centered on the number of chargers proposed and a potential increase in ports, the potential inclusion of a customer service kiosk, ADA considerations, and the proposed location of the project.

Discussion:

The City of Goleta has been selected as a potential participant in SCE's Charge Ready Program for the Goleta City Hall site, which will provide 'make ready' EV infrastructure and EV equipment rebate support for the installation of 17 EV chargers at City Hall. Staff recommends that the City proceed in the Charge Ready program process by approving the Participation Agreement for 17 Level 2 EV charging stations at City Hall and allocating $50,000 in funds for the purchase and installation of charging equipment. SCE's 'make ready' work includes, but is not limited to: all the electrical work up to the stub-out, pedestals, bollards, 600 amp panel, ADA signs, installation of ADA pathway, landscape moving, painting and restriping, trenching, and asphalt work. The estimated in-kind value of SCE's work for the City is about $250,000, which the City would be receiving for free for participating in the SCE Charge Ready program. In addition to the 'make ready' electrical work and infrastructure being free to the City, the City will receive a rebate incentive of $725 per charging port, totaling $12,325, from SCE once EV stations are installed.

SCE Charge Ready Program Process & Conceptual Design

Immediately after the launch of the current SCE Charge Ready Program in August 2021, the City submitted program applications to SCE requesting multiple sites for consideration for EV charging infrastructure. After conducting site visits, SCE notified the City in November 2021 that the Goleta City Hall site had been selected by SCE as the location approved for the program's EV Charging Infrastructure and Rebate offering. SCE then began developing a conceptual design plan for the City.

In December 2021, SCE presented a conceptual design plan to staff. The initial site plan proposed EV infrastructure installation on the south side of City Hall to accommodate six dual-port Level-2 chargers, totaling 12 EV spaces. The initial conceptual design included one ADA-compliant, van-accessible Electric Vehicle Supply Equipment (EVSE) parking space and one standard accessible, unreserved EVSE parking space in compliance with

the California Building Code (Table 11B-228.3.2.1). Charger locations were identified primarily for proximity to an existing transformer as well as ease of improving ADA EV access, which is required to ensure accessible pathways from the ADA EV spaces to the building. The conceptual design meets SCE's cost-effectiveness feasibility criteria for the project.

The Charge Ready program has no restrictions on the use of EVSE, so chargers may be used for future City electric fleet vehicles, employees, and the public as determined by the City. SCE's determination of location does not preclude the City from pursuing installation of EV chargers in other locations around City Hall.

The conceptual design has been reviewed by staff and the City has provided feedback to SCE from the City's Planning, Public Works, General Services, and Neighborhood Services Departments as well as the City Manager's Office. Staff also sought feedback from the City's Energy & Green Issues Standing Committee. On February 24 and March 21, 2022, the City's Energy & Green Issues Standing Committee reviewed SCE's conceptual design and recommended pursuing participation in SCE's Charge Ready Program as well as increasing the number of charging ports in the conceptual design from 12 to 17 EV ports that would extend further east along the southern stretch of parking spaces outside of City Hall. The updated conceptual design with the increased port count was received in early July for staff analysis and review (Attachment 1).

Key elements of the updated conceptual design include infrastructure to accommodate 8 dual port and 1 single port EV charger (17 EV spaces total), the installation of a 200-amp service meter, the installation of a 600-amp distribution subpanel, and an ADA accessible pathway to the south entrance of City Hall. Anticipated impacts from the project are expected to be minimal, with minor vegetation removal for the installation of the pathway. Along the drive aisle and proposed project area, the anticipated restriping to accommodate ADA improvements and EVSE equipment will result in a loss of 7 parking stalls across the 24 that currently exist. This loss of parking will not bring City Hall out of compliance with parking minimum requirements for government buildings pursuant to Title 17, as there are an ample number of spaces for parking onsite.

The increase in ports in the conceptual design from 12 to 17 will help the City maximize project cost efficiencies and increase EV infrastructure at City Hall while meeting the necessary ADA improvements for providing EV charging. The City's Building Department has confirmed that one van accessible and one standard accessible EV charging station spaces are required when 5 to 25 EV charging stations are provided on a site.

EVSE Vendors and Cost Estimates

While SCE is responsible for all the 'make-ready' electrical infrastructure and ADA improvements, the City is responsible for the purchase and installation of EVSE connecting to this electrical infrastructure as well as the networking, operations and maintenance for the 10-year program period. Upon receiving the updated conceptual design, the City solicited informal proposals from vendors and conducted multiple site

visits with EVSE vendors on SCE's approved product list. Staff then used the information gathered from this informal process to identify the estimated cost for the project for the City, as well as used the information to help staff develop a thorough and detailed Request for Proposals (RFP). Staff issued the RFP on September 30, 2022 and is currently reviewing proposals from multiple EVSE vendors.

During the March 2022 Green Committee meeting, staff presented the potential upfront and ongoing costs at the time for the proposed EVSE from SCE's initial conceptual design. This financial analysis was drawn from a proposal from a single vendor, who applied on the City's behalf for CALeVIP funds for the City Hall site to supplement any potential charging project. Following this initial assessment and the March Green Committee meeting, a few factors have impacted the cost of the EV charging stations, charger networking, and maintenance. The primary factor is the requested increase in the number of stations - from 12 to 17 - which ultimately increases the purchasing price of EVSE and the ongoing networking and maintenance costs. Additionally, the initial proposal received from the vendor did not include details and estimates regarding shipping, installation, and potential operations and maintenance warranties necessary to keep the stations in compliance SCE's Charge Ready program.

Upon further research in discussing operations and maintenance with other jurisdictions, EV charging stations are prone to service disruption and need regular maintenance. Evaluating comprehensive options for operations, maintenance, and warranties for EVSE would be fiscally prudent for a small city with no electricians on staff. Staff included this provision in the RFP. Another factor driving up costs of EVSE is inflation, with the Consumer Price Index rising by nearly 4% since March 2022. Since receiving the updated conceptual design, staff's initial outreach to vendors to receive informal proposals on the project for evaluation has revealed an increase in costs and a suite of networking, operations, and maintenance options that will ultimately impact the final costs of any EVSE project.

While estimates vary on the brand and the capacity of the chargers, the cost of Level 2 EV charging equipment ranges from $1,550 to $2,400 per port, with the total for 17 ports averaging close to $35,550. The cost of networking EVSE averages around $260 per port and $4,400 per year for the total number of proposed chargers. Some vendors offer the option of waiving networking fees in exchange for Low Carbon Fuel Standard credits and operations and maintenance models that handle the upkeep of EVSE in the event of service disruption. Staff is currently reviewing proposals from vendors through an RFP process and are evaluating the different operations and maintenance package approaches, while keeping in mind reliability, cost, and service.

Should the City Council approve participating in SCE Charge Ready, staff intends to request to City Council a budget allocation of about $50,000 from the General Fund Unassigned Balance for the purchase and installation of 17 EVSE. This request has changed since the Committee meeting in March from 12 ports to 17 ports, and from about $30,000 to about $65,000. Staff will provide a more accurate cost once the EVSE vendor

is selected after the RFP process. Following Program Participation signing, the City has 45 days to demonstrate the proof of purchase of EVSE.

Goleta City Hall EV Charger Project, FY 22/23					
Fund Type	**Account**	**FY 22/23 Current Budget**	**YTD Actuals**	**Appropriation**	**Total Available Budget**
General Fund	101-40-4500-57010	$15,000	$15,000	$50,000	$65,000
Total		**$15,000**	**$15,000**	**$50,000**	**$65,000**

Since available funding streams are rebates or reimbursements, staff intends to request an allocation of $50,000 in funds to cover the EVSE “turn-key” package. In addition to the ‘make ready’ electrical work and infrastructure being free to the City, the City will receive a rebate incentive of $725 per charging port, totaling $12,325 from SCE, once EV stations are installed, and staff plans to apply for an additional $10,000 of funding from CCCE - for a total of $22,325. With this approach, the staff anticipates offsetting the cost of EV chargers for the City by about half.

Before staff completes the RFP review and selects a vendor, staff seeks Committee direction on the inclusion of specific features that vary between vendors. These features include:

- Cable retractors ($300 premium per charger)
- EV charger card readers ($370 per charger plus $270 per year for operations and maintenance) or a central kiosk ($14,300)

Cable retractors help manage and prevent cable damage, reducing maintenance and improving ease of use. The customer central kiosk would add little to no additional functionality for the project, if card readers are included. Staff recommends that Council consider approving cable retractors and card readers for improved accessibility and service.

Next Steps, Timing, & Additional Funding

For the City to proceed with the SCE Charge Ready program, staff requests that the Committee consider recommending that City Council approve the Program Participation Agreement and Grant of Easement (Attached). Following City Council approval and signing of the Participation Agreement by both parties, the City is required to provide proof of purchase for all vehicle charging equipment designated for the project within 45 calendar days of the date funds are reserved. Staff is timing the RFP process to select a vendor for recommendation prior to bringing this item before City Council, so the City can be prepared to complete a purchase order for the EV charging equipment within 45 days of Council’s Participation Agreement authorization.

The approximate timeline according to SCE Charge Ready staff once they receive our purchase order for the EV chargers is 9 to 12 months for construction to be complete. During this time, SCE will complete the detailed design work, prepare and deliver easements for the City's signature, secure any necessary permits, procure materials, and manage the construction of the make-ready infrastructure work. After SCE's construction is complete, the City will then move forward with installing the EV charging equipment. When the EV chargers have been installed, the City will provide documentation and verification of completed work to SCE. Once the work is verified, SCE will process rebate payments. The City estimates rebate payments from SCE to be $12,325.

In addition to EV charger rebates from SCE, staff has identified other potential funding sources to help offset the cost of EV chargers to the City. Staff has already met with our City's community choice energy provider, Central Coast Community Energy (CCCE), to discuss EV charger rebate programs available to Goleta as a Member Agency. CCCE's Light Duty Vehicle Electrification program has available funding to supplement EV charging equipment with extended benefits being offered to its Member Agencies. Staff plans to apply for and pursue the reservation of funds through this program after the vendor is selected, which can provide the City up to $10,000 of funding from CCCE for the purchase of EV charging stations as part of this project. If approved, reservation of CCCE funds will be committed through a Letter of Intent provided to the City.

In addition to SCE and CCCE, staff intends to pursue other funding sources to further offset the cost of EV chargers. In August 2022, staff applied for a competitive Clean Air Grant through the Santa Barbara County Air Pollution Control District to further offset the cost of the EV chargers. Once the EVSE vendor is selected, staff will work with APCD to provide updated cost information as part of the grant application package.

Recommendation

Staff recommends that the Green Committee receive this update on the City Hall EV Charger project and SCE Charge Ready program, and:

- Consider and recommend that the City Council authorize participation in the SCE Charge Ready program and the City Manager to sign the Participation Agreement;
- Recommend a budget allocation of about $50,000 from the General Fund Unassigned Balance for the professional services of an EVSE vendor to execute a 17-port EVSE "turn-key" package;
- Support the RFP process and staff selection and recommendation of the best fit EVSE vendor for the proposed Charge Ready project at Goleta City Hall; and
- Support staff efforts to apply for EVSE grants and rebates.

In addition, staff seeks Committee direction on the inclusion of specific features that vary between EVSE vendors. These features include:

- Cable retractors at ~$300 premium per charger (***Recommended by staff)***
- EV charger card readers at ~$370 per charger plus $270 per year for operations and maintenance (***Recommended by staff)***

ITEM III: FLEET PROCUREMENT POLICY

The purpose of this item is for the Energy / Green Issues Standing Committee to receive a presentation from staff on the framework and contents of a Draft Green Fleet Policy that the General Services Department is developing; discuss and provide input to staff; and recommend vehicle purchases in the near-term to meet City fleet needs.

Background:

The City currently possesses a fleet of 22 fleet vehicles. Twenty vehicles include sedans and light and medium-duty trucks. The most recent purchases include an electric vehicle (EV) for parking enforcement and a Mobile Book van for the Library. The City owns other specialized equipment for construction (e.g., dump truck) and/or specialized work. Approximately half of the fleet is approximately 17 years old, while half of the fleet averages 7 years old.

In Fiscal Year (FY) 2022, Council authorized a Facilities Maintenance Technician for the newly created General Service Department. Moreover, the Fiscal Year 2022-23 (23) Adopted Budget includes the creation of two new Maintenance Workers, a Public Works Supervisor, and two engineering positions related to street lighting and capital projects. These positions perform significant fieldwork, which requires a vehicle for travel and to deliver tools and other supplies to locations throughout the City.

Discussion:

Development of Green Fleet Policy

The FY 23 workplan for the General Services Department includes the development of a Green Fleet Policy. While the policy is still under development, staff thought it prudent to share the current draft with the Committee, which staff will eventually present in final form to City Council for consideration of adoption. The purpose of the policy is to implement sustainable fleet management and establish replacement and purchasing criteria to address operational needs, while balancing fiscal priorities and environmental sustainability. The policy sets useful life targets for vehicle replacement, which in turn, will inform reserve policy for replacement of fleet assets.

In the long term, statutory and regulatory "clean fleet"[1] mandates, coupled with the City's development of EV charging infrastructure, will heavily influence procurement decisions for the City's fleet. In the near and medium term, as mandates are gradually implemented, City infrastructure is developed, and alternative vehicle markets mature, staff recommends the adoption of a Clean Fleet Policy that includes a hierarchy that prioritizes electric vehicles, followed by electric-hybrid plug-in vehicles, hybrid vehicles, and lastly, internal combustion engine vehicles. The policy will include a protocol for a Department

[1] Proposed Green Fleet procurement mandates by the California Air Resources Board require that 50% of municipal fleet purchases be "clean" beginning in 2024 and increasing to 100% by 2027 (Advanced Clean Fleets Initiative - https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets)

to request a Clean Fleet Hierarchy exception where an EV alternative fails to provide key functionality (e.g., towing/cargo capacity, range restrictions, special performance requirements), where cost of the EV model is prohibitive, and/or where EV infrastructure is not available to support the vehicle.

Immediate Vehicle Purchases

As stated above, with the creation of new field positions in FY 23, there is a need to procure vehicles for staff who are imminently joining the organization. Staff is presently soliciting quotes for several vehicles and will bring the recommended purchases to Council in the near future.

Based upon the proposed Clean Fleet Hierarchy, staff prioritized the purchase of electric and hybrid vehicles. As highlighted in the preceding item, the Planning and Environmental Review Department is pursuing the installation of 17 Level 2 EV charging stations on the south side of City Hall in approximately the next 12 months. Moreover, the recently installed solar array at City Hall includes conduit for an additional six (6) Level 2 chargers, which could be installed at a future time.

For this reason, staff recommends the purchase of one EV, two plug-in hybrid EVs, and one trailer-mounted aerial lift, which can be towed with an existing vehicle, thus avoiding purchase of a new internal combustion engine vehicle. Consistent with the draft policy, staff is recommending procurement of internal combustion vehicles only for maintenance vehicles, which require utility bodies for storing a variety of tools and equipment. Alternative fuel or EV utility models are in early stages of development but are not readily available yet in the marketplace. Moreover, the City does not possess, nor are there conceptual plans for the installation of more intricate Level 3 charging capacity.

Expanding charging infrastructure at various City facilities will be needed to support future fleet expansion and replacement units. Market development and charging capacity will enhance the City's options for specialized medium and heavy-duty vehicles.

Table 1 summarizes Staff's near-term procurement recommendations:

Vehicle	User	Critical Specification	Staff Purchasing Recommendation	Infrastructure Needed to Support EV Option
SUV	Pool Vehicle	5 Passenger	Plug-in hybrid electric; Toyota Rav-4 (*or similar*)	Level 2 Charging
Light-Duty Truck	Public Works	Toolbox, Light bar	Battery-electric; Ford Lightning F-150 (*or similar*)	Level 2 Charging

Sedan	Pool Vehicle	Light bar	Plug-in hybrid electric; Toyota Prius Prime (*or similar*)	Level 2 Charging
Aerial Lift	Public Works	Aerial lift	Trailer mounted lift to be towed with existing vehicle	N/A
Service Trucks (4)	Public Works, General Services	Service body, Towing capacity	Procure "standard" (internal combustion) vehicle; continue to expand charging infrastructure to support future vehicles	Level 2/3 Charging

Next Steps:

After consultation with the Energy and Green Issues Standing Committee, General Services will present the Green Fleet Policy to City Council for consideration of adoption along with near-term vehicle purchases that require City Council approval.

General Services and Planning and Environmental Review staff will continue to develop an EV Charging Infrastructure Plan to develop additional charging capacity at other City facilities to support fleet needs. Moreover, the Public Works Department is developing a capital improvement project for the long-term use of the Corporation Evaluation of EV infrastructure at this site, which houses a significant number of the City's light and medium-duty vehicles which should be included as part of this project scoping.

The Green Fleet policy will establish the needed framework and transition to sustainable fleet management for Goleta's municipal fleet. As the EV market develops, City charging capacity increases, work practices evolve (e.g., remote work), the policy will be revised to reflect advancements in technology, availability of City charging infrastructure, and "right sizing" of the City's fleet.

ITEM IV: REACH CODE & BUILDING ELECTRIFICATION

The purpose of this item is for the Energy / Green Issues Standing Committee to receive a presentation from staff on implementing enhancements to State building codes, otherwise known as Reach Codes, or other regulatory means to establish all-electric requirements for new construction and provide direction to staff regarding possible pathways for implementation. The other purpose of this item is for the Committee to give staff direction on pursuing an additional Reach Code provision requiring increased electric vehicle charging infrastructure for new construction to help provide critical charging

infrastructure for housing and workplaces, while meeting the growing gap in EV charging demand and availability.

Staff is scheduled to bring forward a draft Reach Code and supporting ordinance to the City Council in February 2023 for consideration of adoption and first reading. A description of Reach Codes, their impacts, and the potential pathways for building electrification the City can pursue is summarized below.

Background:

Scientific evidence in the 2022 Intergovernmental Panel on Climate Change (IPCC) Report demonstrates that we are already experiencing the widespread and severe impacts of a warming climate. With the climate already 1.1°C above pre-industrial levels, aggressive reduction of greenhouse gas (GHG) emissions from governments, businesses, and communities is necessary to limit global warming to under 1.5°C to minimize the current and anticipated escalating impacts.[2]

As climate data has become more definitive, California has adopted comprehensive goals to reduce GHG emissions and support local governments in carrying out community level emissions reductions strategies. With the passage of Senate Bill 32 in 2016, California set targets to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030 and 80% below 1990 levels by 2050.[3]

The California Air Resources Board recently released its 2022 Scoping Plan, which provides an implementation pathway to meet the State's carbon reduction goals. Statewide, residential and commercial buildings are responsible for approximately 25% of California's greenhouse gas (GHG) emissions when accounting for fossil fuels such as natural gas consumed onsite and electricity demand. The Scoping Plan specifically recommends all-electric buildings become standard for residential construction starting in 2026 and non-residential construction starting in 2029.

Locally, Goleta has prioritized reducing its emissions in the energy sector through its 100% renewable electricity goal by 2030, with an interim goal of 50% renewable electricity for municipal operations by 2025. Due to escalating state targets for the renewable portfolio standards for utilities and the City joining Central Coast Community Energy, the steady increase in renewable electricity on the grid will lower the emissions impacts of our electricity significantly over the next decade.

In order to further reduce the City's building emissions, City Council directed the Sustainability Program to prioritize developing a Reach Code to encourage building

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[2] IPCC, 2022: *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press.

[3] .Senate Bill 32, Pavley. California Global Warming Solutions Act of 2006: emissions limit. 2016. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32

electrification during the Planning and Environmental Review Annual Work Program process. 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.

In 2020, Goleta's energy use (from both electricity and natural gas) accounted for 40.4% of the community's total emissions. Of that total energy use, natural gas use in buildings accounted for 40% of our community's energy emissions. While efforts have been made to decarbonize the natural gas system through the development of renewable natural gas (RNG), there are insufficient supplies to properly meet state and local demand, ultimately leaving the full decarbonization of the natural gas system infeasible.

As stated in the 2021 California Energy Commission (CEC) Integrated Energy Policy Report, "building electrification is the most promising decarbonization strategy and could result in significant reductions in residential and commercial building gas demand."[4] Building electrification additionally plays a key role in preventing the lock-in of future emissions from natural gas use. Buildings are long-term assets with energy-consuming equipment that essentially "lock in" system infrastructure for many years. While usually affecting a relatively small percentage of the building stock in built-out communities, local building codes affecting new construction are an important and necessary step for jurisdictions seeking to avoid unnecessary emissions which will be costlier to mitigate in the future.

City staff have begun the process of collaborating with the County of Santa Barbara and the City of Carpinteria to coordinate regional alignment for each jurisdiction's respective Reach Code, pooling staff resources to conduct public outreach, stakeholder engagement, and source technical assistance from industry experts. With over 57 jurisdictions in California already having adopted Reach Codes to decarbonize their buildings, the City has an opportunity to expand upon current state requirements in the Energy Code and eliminate and reduce future emissions sources by regulating new construction.

Discussion:

Impacts of Natural Gas Use

Natural gas is a fossil fuel that consists of a compound known as methane (CH_4), which is approximately 25 times more potent as a GHG than carbon-dioxide over a 100-year span.[5] Methane is even more potent in the first two decades of its lifespan, with a near-term global warming potential of 84 times that of carbon dioxide. The Environmental

[4] 2021 IEPR Volume III - Decarbonizing the State's Gas System. https://efiling.energy.ca.gov/GetDocument.aspx?tn=242233

[5] "Overview of Greenhouse Gases," U.S. Environmental Protection Agency, https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane

Defense Fund estimates that "[a]bout 25% of the man-made global warming we're experiencing is caused by methane emissions."[6]

Emissions from natural gas use can come from both its intentional use (heating, cooking) and unintentional release due to pipeline and storage leaks, inefficient combustion, and abandoned wells. As in the case of Aliso Canyon from October 2015 to February 2016, approximately 109,000 metric tons of methane leaked from the natural gas storage facility.[7] While the leak was contained, widespread small-scale leaks continue to emit methane as a byproduct of storage and transmission, increasing the amount of potent GHGs in our atmosphere.

Methane leaks are not only impactful due to their GHG potential, but natural gas leaks can also pose a threat to property and human safety due to the potential for explosions of varying severity. One such example is the explosion that occurred in 2010 in San Bruno, causing the loss of eight lives and nearly 100 homes as the result of aging infrastructure and continued deferred maintenance by PG&E.[8] Methane gas infrastructure is additionally vulnerable during seismic events where ruptured gas lines create a high fire risk that can lead to much greater property damage. Additionally, a recent study has revealed equity and environmental justice concerns regarding an increase of natural gas leak density as it correlates to median household income and community racial demographics.[9]

Another primary consideration of pursuing an electrification policy is the positive impact it will have on indoor air quality, especially for vulnerable populations. Indoor natural gas use for stovetop and oven cooking has been linked to an increase in respiratory diseases, including increased instances of wheezing and asthma, particularly in children.[10][11] The combustion of natural gas in homes can result in toxic levels of nitrogen dioxide, formaldehyde and carbon monoxide,[12][13] Ultimately, continued natural gas use has

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[6] "Methane: The other important greenhouse gas," Environmental Defense Fund, https://www.edf.org/climate/methane-other-important-greenhouse-gas

[7] Determination of Total Methane Emissions from Aliso Canyon Natural Gas Leak Incident. California Air Resources Board, 2021. https://ww2.arb.ca.gov/sites/default/files/2020-07/aliso_canyon_methane_emissions-arb_final.pdf

[8] Five Years After Deadly San Bruno Explosion: Are We Safer?. KQED (2015). https://www.kqed.org/news/10667274/five-years-after-deadly-san-bruno-explosion-are-we-safer

[9] Environmental Injustices of Leaks from Urban Natural Gas Distribution Systems: Patterns among and within 13 US Metro Areas. *Environmental Science & Technology*. (2022) https://pubs.acs.org/doi/10.1021/acs.est.2c00097

[10] Andee Krasner, MPH & T. Stephen Jones, MD, MPH. Cooking with Gas Can Harm Children: Cooking with Gas is Associated with Increased Risk of Childhood Respiratory Illnesses, Including Asthma.

[11] Weiwei Lin, Bert Brunekreef, and Ulrike Gehring. Meta-analysis of the Effects of Indoor Nitrogen Dioxide and Gas Cooking on Asthma and Wheeze in Children. Internation Journal of Epidemiology 2013;42:1724–1737

[12] Methane and NO x Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes. (2022). *Environmental science & technology*, *56*(4), 2529-2539. https://pubs.acs.org/doi/10.1021/acs.est.1c04707

[13] "Pollution in the Home: Kitchens Can Produce Hazardous Levels of Indoor Pollutants," Julie Chao, Lawrence Berkeley National Laboratory, July 23, 2013, https://newscenter.lbl.gov/2013/07/23/kitchens-can-produce-hazardous-levels-of-indoor-pollutants/

broader climate, health and public safety implications, including the significant social and financial costs associated with respiratory illness and poor indoor air quality.

Building Decarbonization Policy Pathways

Building decarbonization will require a varied approach with diverse strategies to address both the existing building stock and new construction. As buildings are long term assets that can lock in emissions through the installation of natural gas infrastructure, regulating the inclusion of natural gas in new construction presents an opportunity to improve the future emissions profile for the Goleta community and reduce further fossil fuel-based energy use.

Recent market advancements and state policy changes have encouraged the improvement of electric appliances such as electric heat pumps, induction stoves, and water heaters that are proving to be more efficient than their natural gas counterparts. Encouraged by the 2022 California Building Energy Efficiency Standards (Energy Code), heat pumps are appliances that provide heating and cooling by moving heat from one place to another via temperature differentials, using less energy and producing fewer emissions than traditional heating, ventilation and air-conditioning (HVACs) and water heaters.[14] Heat pumps can replace less efficient resistance heating in many places, reducing energy consumption and customer utility bills.

While existing buildings represent the bulk of emissions in the energy sector, the City can take action to prevent future emissions with a Reach Code and undertake efforts to provide energy resilience and efficiency programs to mitigate the impact of the current building stock. In exploring Reach Codes, building decarbonization, and electrification for new construction, there are several pathways and approaches that local jurisdictions like Goleta can utilize.

Option 1: Develop an electric-preferred local energy ordinance (Reach Code) that discourages natural gas infrastructure in new construction, additions, and major alterations.

The State Building Standards Commission adopts a new California Building Standard Code (CBSC) every three years that jurisdictions must adopt and adhere to; however, local jurisdictions can also draft 'Reach Codes' to go beyond the requirements of the State. Reach Codes typically address energy efficiency and/or energy performance and can be adopted and updated on the three-year state code cycle. In previous code cycles, Reach Codes have focused primarily on increasing energy efficiency and the energy performance of buildings. Passing a Reach Code that amends the 2022 Energy Code will need approval from the CEC, demonstrating that the stipulations be cost effective (the cost of the measure is less than the operation lifetime savings) and are not preempted by Federal appliance standards.

[14] 2022 Building Energy Efficiency Standards Summary. California Energy Commission. https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdateSummary_ADA.pdf

Goleta may adopt an electric-preferred ordinance as a Reach Code that incentivizes all-electric construction but allows for mixed fuel (natural gas and electricity) buildings to be built at a higher efficiency standard. This approach can be achieved by requiring more stringent energy storage and renewable energy standards, such as requiring PV or stricter Total Energy Design Rating (EDR) margins through a variety of efficiency measures, space-conditioning, indoor lighting, mechanical ventilation, and service water heating. This option would not prevent the installation of natural gas in new construction but push for higher efficiency than the CBSC in the buildings that do include it.

Given the challenges monitoring compliance, the anticipated emissions of adding new natural gas service, the three-year lifetime of the Reach Code, the CEC approval process, and extensions to the timeline due to these measures, staff does not recommend adopting a Reach Code that requires an increase in energy performance as there are more clear and effective pathways.

Option 2: Develop an all-electric energy ordinance (Reach Code) that regulates natural gas infrastructure in new construction, additions, and major alterations.

Reach Codes can also, and more simply, require all-electric construction. The City may opt to adopt an all-electric Reach Code by amending the CALGreen portion of the CBSC. In doing so, this approach would not require staff to obtain CEC approval of the requirements or analyze cost effectiveness for approval. As with an electric-preferred code, the City would have to reconsider and re-adopt the Reach Code in accordance with the three-year CBSC cycle.

While this option is an effective method to regulate the installation of natural gas in new buildings, the staff time dedicated to passing and renewing this Reach Code every three years can be minimized by pursuing Option 3.

Option 3: Develop an all-electric ordinance that uses jurisdictional authority to regulate public health and safety by prohibiting natural gas infrastructure installation in new construction, additions, and major alterations. ***Recommended by Staff.***

Following the example of City of Santa Barbara and the intended pathway of the County of Santa Barbara and Carpinteria, the City could adopt an ordinance prohibiting the installation of natural gas infrastructure in new construction, additions, and renovations by citing health and safety concerns. This pathway utilizes the City's jurisdictional authority and police powers though the California Health and Safety Code as opposed to the CBSC. Advantages to this pathway are that it would not require the CEC's approval, would not require renewal, is simpler to ensure compliance and would be the most straightforward to adopt and implement of the options presented.

This would be a highly effective and low resource cost measure that the City can implement to reduce and avoid carbon emissions. This pathway would also provide regional consistency along the South Coast, reducing confusion for the building industry. Adopting a natural gas prohibition ordinance for new construction would align Goleta with

the City of Santa Barbara (adopted), County of Santa Barbara (in process), County of Ventura (adopted/included in new General Plan), and the City of Carpinteria (in process).

Due to the simplicity of the route, the lack of renewal requirements, the emissions reductions potential and the opportunity to develop regional alignment, staff recommends the City of Goleta proceed with this option.

New Construction Ordinance Approaches

	Efficiency	Electric-Preferred	Electric Only		Electric Only Plus Efficiency
			Natural Gas Moratorium	Electric Only	
Mechanism	Energy Code	Energy Code	Jurisdictional authority (e.g., Health and Safety)	CALGreen	(Jurisdictional authority or CALGreen) plus Energy Code
Requirements	All new construction exceeds minimum energy code	Only mixed fuel buildings exceed minimum energy code	No new gas infrastructure (Hookups or Piping)	All new construction is electric only	All new construction is electric only AND exceeds minimum
Considerations	Simplicity Preserves choice Specific measures	Preserves Choice Lower GHG Savings	Longest Lasting	Must be renewed	Biggest impact Must be renewed

Source: Statewide Reach Codes Program, Results & Findings: Single Family New Construction Cost-Effectiveness Study webinar

Energy Resilience and Reliability

As a community located at the end of the Southern California Edison power lines in a high-risk wildfire region, local natural disasters and climate-driven heat events have highlighted the vulnerability of Goleta's electric grid. While the state has done much to improve the development of renewable energy resources, California still relies upon natural gas to provide power when renewable sources are not active and maintain grid reliability. Public Safety Power Shutoffs, continuous wildfire risk, and aging natural gas infrastructure remain frequent threats and of significant concern to energy reliability for the City of Goleta.

Following the rotating blackouts of August 2020, the California Public Utilities Commission doubled down on enhancing the procurement for and management of the grid with battery storage and demand response programs. In 2020, California had just 250 MW of battery storage installed on the grid, but by this past heat wave in September 2022 the state was supported by over 3.2 GW of battery storage (discharging more than the capacity of

Diablo Canyon back into the grid when needed).[15] The addition of battery storage capacity paired with demand response programs helped keep the grid online for California in the event of an extended, historic heat wave.

While some industry professionals and proponents of natural gas commonly state that mixed-fuel buildings have a greater resiliency in the event of an electrical outage, many modern gas appliances (furnaces, stoves) rely upon an electric ignition to operate. Natural gas outages take significantly longer to repair than those in the electric system, taking sometimes months or years to come back online. As an area that is subject to wildfires, earthquakes and debris flows, the prospect of an extended outage is of critical concern. Additionally, in the event of an outage, electric-reliant ventilation for natural gas stove use is unavailable and exacerbates poor indoor air quality.

While concerns about grid reliability in our community are valid, the emergence of battery storage and electricity management programs can alleviate potential impacts of lost electricity service. In modern developments, smart thermostats and energy management software that allow for demand management are commonplace and a key feature for new all-electric buildings. For example, "using heat pump water heaters as thermal batteries can help match the timing of electricity demand to the generation of renewable energy, as well as reduce the severity of the late-afternoon demand ramp as solar output rapidly decreases."[16]

Additional Reach Code Topic: Electric Vehicle Charging Requirements

The City could also adopt a Reach Code that requires an increase in electric vehicle charging infrastructure for new construction by amending CALGreen. Commonly included in California Reach Codes, such as those of the Cities of Carlsbad, Berkeley, Burlingame, and Encinitas, increased EV infrastructure requirements in a Reach Code can help jurisdictions provide critical charging infrastructure for housing and workplaces, meeting the growing gap in EV charging demand and availability. Adopting a Reach Code component that addresses electric vehicle charging infrastructure would 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.

There are three levels of EV infrastructure requirements referred to in the Building Code:

1. **EV Capable Space:** a parking space that has an installed electrical panel capacity with a dedicated branch circuit and a continuous raceway/conduit from the panel to the future EV parking spot

[15] How Clean Energy Kept California's Light's On During a Historically Extreme Heat Wave. Forbes. September 19, 2022. https://www.forbes.com/sites/energyinnovation/2022/09/19/how-clean-energy-kept-californias-lights-on-during-a-historically-extreme-heat-wave/?sh=730fb1c446bb

[16] CEC,2019 Integrated Energy Policy Report, February, 2020. Pg. 176 https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2019-integrated-energy-policy-report

2. **Level 2 EV Ready Space:** a parking space that has installed electrical panel capacity, raceway/conduit and wiring to terminate in a junction box or 240-volt charging outlet such that Electrical Vehicle Charging Equipment (EVSE) can be directly plugged into it without additional work.
3. **Electric Vehicle Charging Station (EVSE):** a parking space that includes an installed and operable Level 2 EV charging station.

The 2022 baseline CBSC requirements for new construction EV infrastructures are as follows:

- **For new construction of one and two-family homes and townhomes with garages:** requires that all spaces must be EV capable and have service or subpanel capacity for future EV chargers.
- **For 3+ multi-family dwellings, hotels, and motels:**
  - **New Construction:** 10% of parking spaces must be EV capable; 25% must be EV Ready with low power Level 2 receptacles; 5% of parking spaces in buildings with 20+ units require Level 2 EVSE.
  - **Existing Buildings:** 10% of new added parking spaces must be EV capable; 10% of altered spaces must be EV capable.
- **For nonresidential new construction:**

Requirements for Nonresidential New Construction

Table 2. Requirements for Nonresidential Construction

Total Number of Parking Spaces	Number of Required EV Capable Spaces	Number of EVCS (EV Capable provided with EVSE)[2]
0–9	0	0
10–25	4	0
26–50	8	2
51–75	13	3
76–100	17	4
101–150	25	6
151–200	35	9
201 & more	20% Of total[1]	25% of EV Capable Spaces[1]

1. Calculation for spaces shall be rounded up to the nearest whole number.

2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count toward the total number of required EV capable spaces shown in column 2.

Source: California Energy Codes & Standards, 2022 CalGreen Electric Vehicle Requirements Fact Sheet

The City has several options for increasing EV infrastructure adoption for new construction. The City can build upon CALGreen's baseline provisions by opting to make its Tier 1 or Tier 2 voluntary provisions mandatory (as detailed in the right two columns below).

Table 1. Requirements for Residential Construction

Occupancy Type	2022 CALGreen Mandatory Provisions	2022 CALGreen Tier 1 Voluntary Provisions	2022 CALGreen Tier 2 Voluntary Provisions
One- and Two-Family Homes, Town-homes with Private Garages	• All EV Capable • Raceway • Service Panel and/or Subpanel Capacity and Space(s)	• None	• None
Multi-Family Dwellings, Hotels and Motels	NEW CONSTRUCTION: • 10% of parking spaces to be EV Capable • 25% of parking spaces require EV Ready w/Low Power Level 2 Receptacles* • 5% of parking spaces in buildings with 20 + units require Level 2 EV Supply Equipment (EVSE)* • Spaces identified on plans EXISTING BUILDINGS: • 10% of new added parking spaces for existing buildings to be EV Capable Spaces • 10% of altered spaces to be EV Capable (permitted activities)	NEW CONSTRUCTION: • 35% of parking spaces require EV Ready w/Low Power Level 2 Receptacles • Projects with 20+ units must offer 10% of total parking spaces w/level 2 EV Supply Equipment (EVSE)**	NEW CONSTRUCTION: • 40% of parking spaces re-quire EV Ready w/Low Power Level 2 Receptacles • Projects with 20+ units must offer 15% of total parking spaces w/level 2 EV Supply Equipment (EVSE)**

*When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS.

** When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

This would simplify the compliance process for building staff and developers while expanding upon the baseline CALGreen requirements. The City can alternatively emulate EV Reach Code components adopted by other jurisdictions, which vary based on City size and electric vehicle adoption targets. Below are a few examples of adopted EV policies of small to mid-size cities:

City of San Luis Obispo

Building Type	EV Requirements
New one and two family	CALGreen Baseline
Multiunit residential w 5 or more units	Number of Total Required Spaces 5-10: 1 EV ready space minimum, plus 25% EV capable 11-15: 2 EV ready spaces minimum, plus 50% EV capable 16-25: 3 EV ready spaces minimum, plus 50% EV capable More than 25: 10% EV ready spaces, plus 50% EV capable

Nonresidential	1 EV space minimum, plus 25% EV capable	2 EV ready spaces minimum, plus 50% EV capable	3 EV ready spaces minimum, plus 50% EV capable	10% EV ready spaces, plus 25% EV capable

Encinitas

Building Type	EV Requirements
New one- and two- family dwellings including townhomes w private garages	Each unit must include a dedicated 208/240 volt branch circuit rated to 40 amps min. (Level 2 ready)
New Multifamily dwellings	At least 15% of total number of spaces shall be equipped w EVSE
New nonres (mixed use, hotels)	At least 8% spaces with EVSE
Non res additional and alterations of buildings of 10,000 sqft or more	At least 8% of spaces provided w EVSE (For any non-residential alteration or addition that requires a building permit with square footage larger than 10, 000 sq. ft.)

Santa Monica

Building Type	EV Requirements
New Multifamily	10% EV installed, 20% EV ready, 70% conduit equipped
New Non-Residential	10% EV installed, 30% conduit equipped (DC fast may substitute 5 L2)
New Office	10% EV installed, 20% EV ready, 30% conduit equipped (DC may substitute 4 L2)
New w/ 25+ and Remodel/expansion that has more than 50 or more existing spots or adds 5	One charging station for facilities with 25-49 spaces and two for 50-99. Additional per 50.

To further transportation electrification and assist the City in regional goals, staff recommends further exploration of an increased requirement for EV charging components for new construction as a Reach Code component. Should the Committee direct staff to pursue an EV inclusion in the Reach Code, staff will evaluate existing Reach Codes adopted by other jurisdictions to identify the best fit for the Goleta community. As the Reach Code process advances, staff will bring more detailed policy recommendations to the Committee for evaluation and recommendation to the City Council.

Implementation & Applicability

After determining the proper pathway, there are additional considerations that the City could evaluate for the implementation of a Reach Code. Exemptions have been of interest to local developers in other jurisdictions. In 2021, the City of Santa Barbara's natural gas prohibition ordinance exempted restaurants, clean rooms, laboratories and projects

where electrification is not feasible or deemed to be in the public interest. When there are exemptions within a natural gas prohibition, there are trade-offs, such as less GHG emissions reduction, reduced cost-effectiveness, and a reduction in public health and hazard safety benefits. Staff recommends limiting exemption pathways for new construction, additions, or alterations unless where infeasible or cost prohibitive. For regional consistency, staff recommends applying the ordinance to alterations, which could include projects that demolish, modify, or replace 50% or more of roof framing or exterior walls exterior finish material. These proposed exemptions would be vetted by Planning & Environmental Review and informed by continued community outreach.

Regional Collaboration & Public Outreach

Starting in May 2022, staff have engaged in regional coordination and collaboration with the County of Santa Barbara and City of Carpinteria to develop Reach Codes for each jurisdiction. Additionally, the group has received technical and public outreach support from building and energy experts at the Tri-County Regional Energy Network, Colorado Energy Group, Southern California Edison, NegaWatt, and the City of Santa Barbara.

The intent of this collaboration is to align each jurisdiction with similar if not identical Reach Codes to unify local building electrification policies. Both the County of Santa Barbara and the City of Carpinteria are presenting their pathways to their respective committees and boards, recommending a municipal health and safety prohibition on natural gas in new construction, mirroring the policy recently adopted by the City of Santa Barbara in 2021. The benefit of unifying the codes is that it would increase clarity and consistency for developers, who operate across jurisdictional boundaries, and would maximize the effectiveness of emission reduction practices in new construction, while improving regional collaboration on taking climate action.

The group has been holding standing meetings to discuss policy avenues, share resources, and coordinate outreach strategy for stakeholders and the broader community. The collaborative outreach process consists of both an Advisory Committee of selected stakeholders and open public workshops to engage the whole community on the topic of building electrification and Reach Codes. The first Advisory Committee meeting was held on September 15, co-hosted and presented by the City of Goleta, with 31 people in attendance. At the meeting, members of each jurisdiction provided an overview of Reach Code pathways and solicited feedback from attendees on considerations for future policy development. Feedback was overwhelmingly positive for the pursuit of Reach Codes and electrification from members of the community in attendance at the Advisory Committee meeting, and attendees brough up key considerations for exemptions and considerations for building staff. In addition, staff from the County of Santa Barbara and City of Goleta recently presented a brief overview of the Reach Code process, additional outreach opportunities, and possible Reach Code content to the Santa Barbara South Coast Chamber of Commerce Policy Committee on September 28, 2022.

Outreach to the public and targeted stakeholders will continue through 2023, focusing on narrowing the details after a pathway is chosen by each jurisdiction. Future outreach is

anticipated to focus more closely on exemptions (if applicable), the appeal process, and existing building renovation thresholds.

Upcoming outreach touchpoints include:[17]

- 10/15/22 - Public Workshop #1 (afternoon & evening sessions)
- 10/18/22 - Advisory Committee Meeting #2
- Date TBD – Public Workshop #2
- Date TBD – Advisory Committee Meeting #3

Recommendation & Next Steps

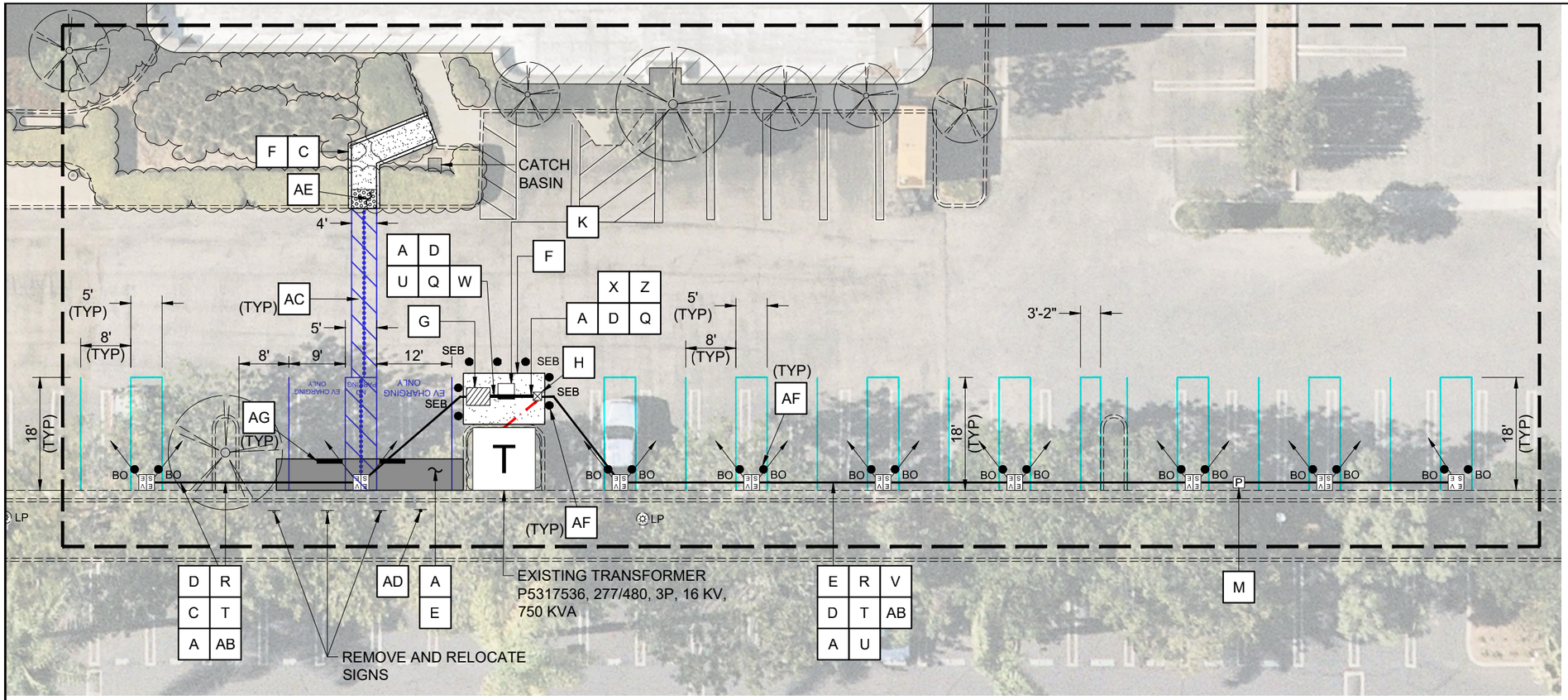
Staff recommends that the City pursue the municipal health and safety ordinance to prohibit natural gas infrastructure in new construction, additions, and major alterations. Should the Committee direct staff to pursue the recommended or an alternative pathway, staff will continue internal and external engagement with stakeholders to develop Reach Code policy for future review by the Green Committee.

Additionally, staff recommends that the City evaluate the addition of an electric vehicle charging component of the Reach Code to encourage both building and transportation electrification.

Attachments

1. Attachment 1 – Updated SCE Conceptual Design
2. Attachment 2 – SCE Program Participation Agreement
3. Attachment 3 – Green Fleet Policy

[17] Energy Reach Code Development. Santa Barbara County Regional Climate Collaborative.(2022). https://sbco.mysocialpinpoint.com/sbcollaborative/reachcode/



SYMBOL LEGEND:

- EXISTING SIGN
- LP — EXISTING LIGHT POLE
- BO — PROPOSED BOLLARD
- SEB — PROPOSED SERVICE EQUIPMENT BOLLARD
- PROPOSED WHEELSTOP
- PROPOSED SIGN
- P — PROPOSED PULL BOX
- PROPOSED SERVICE METER
- PROPOSED STEP DOWN TRANSFORMER
- PROPOSED DISTRIBUTION SUBPANEL
- EVSE — DUAL PORT EVSE
- EVSE — SINGLE PORT EVSE
- T — EXISTING SCE TRANSFORMER
- SCE ELECTRICAL SERVICE SUPPLY TO METER, BY T&D
- LIMITS OF WORK
- ELECTRICAL CONDUIT (+2")
- ELECTRICAL CONDUIT (<2")
- PROPOSED ACCESSIBLE STRIPING
- PROPOSED ACCESSIBLE ROUTE
- PROPOSED STRIPING
- PROPOSED ASPHALT CONCRETE PAVEMENT
- PROPOSED CONCRETE
- PROPOSED TRUNCATED DOMES

CUSTOMER INFRASTRUCTURE IMPROVEMENTS

	CONSTRUCTION NOTES	E.Q.
A	REMOVAL OF HARDEN SURFACING	610 SF
C	REMOVE VEGETATION	115 SF
D	2' WIDE UTILITY TRENCH	230 LF
E	PROPOSED ASPHALT CONCRETE PAVEMENT	560 SF
F	PROPOSED CONCRETE	270 SF
G	INSTALL 600 AMP DISTRIBUTION SUBPANEL	1 UNIT
H	INSTALL 200 AMP SERVICE METER (NO PANELBOARD)	1 UNIT
K	INSTALL 150 KVA STEP DOWN TRANSFORMER	1 UNIT
M	INSTALL PULL BOX	1 UNIT
Q	INSTALL BELOW GRADE PVC CONDUIT +2"	55 LF

R	INSTALL BELOW GRADE PVC CONDUIT <2"	1815 LF
T	#8 WIRE CONDUCTOR	2775 LF
U	#6 WIRE CONDUCTOR	1455 LF
V	#4 WIRE CONDUCTOR	625 LF
W	3/0 WIRE CONDUCTOR	85 LF
X	2/0 WIRE CONDUCTOR	60 LF
Z	350 MCM WIRE CONDUCTOR	230 LF
AB	DATA CAT5E CABLE	1005 LF
AC	STRIPING FOR ADA STALLS	1 UNIT
AD	INSTALL ACCESSIBLE EVSE SIGNAGE	1 UNIT
AE	INSTALL TRUNCATED DOMES	15 SF
AF	INSTALL SITE BOLLARDS	23 UNITS

AG	INSTALL WHEELSTOPS	2 UNITS

NOTES:

1. UTILITY DISTRIBUTION INFRASTRUCTURE SHOWN IN RED BUILT BY OTHERS AND SHOWN ONLY FOR PROJECT CLARITY AND COORDINATION.
2. IMPACTED EXISTING PARKING = 24 TOTAL SPACES; 24 STANDARD SPACES, NET LOSS OF STALLS = 7
3. PROPOSED CHARGING = 17 TOTAL SPACES; 1 VAN ACCESSIBLE EVSE, 1 STANDARD ACCESSIBLE UNRESERVED EVSE, 15 STANDARD EVSE
4. EVSE LAYOUT BASED ON USE OF DUAL AND SINGLE PORT STYLE CHARGERS
5. PULL BOXES TO BE INSTALLED AS NEEDED
6. PROPOSED SERVICE PANEL MAY BE STANDARD OR 100% RATED. SEE SINGLE LINE FOR CLARIFICATION.

*LINEAR FOOTAGE QUANTITIES INCLUDE VERTICAL TRAVEL

N

0 5 10 20 40
SCALE IN FEET

Blair, Church & Flynn CONSULTING ENGINEERS

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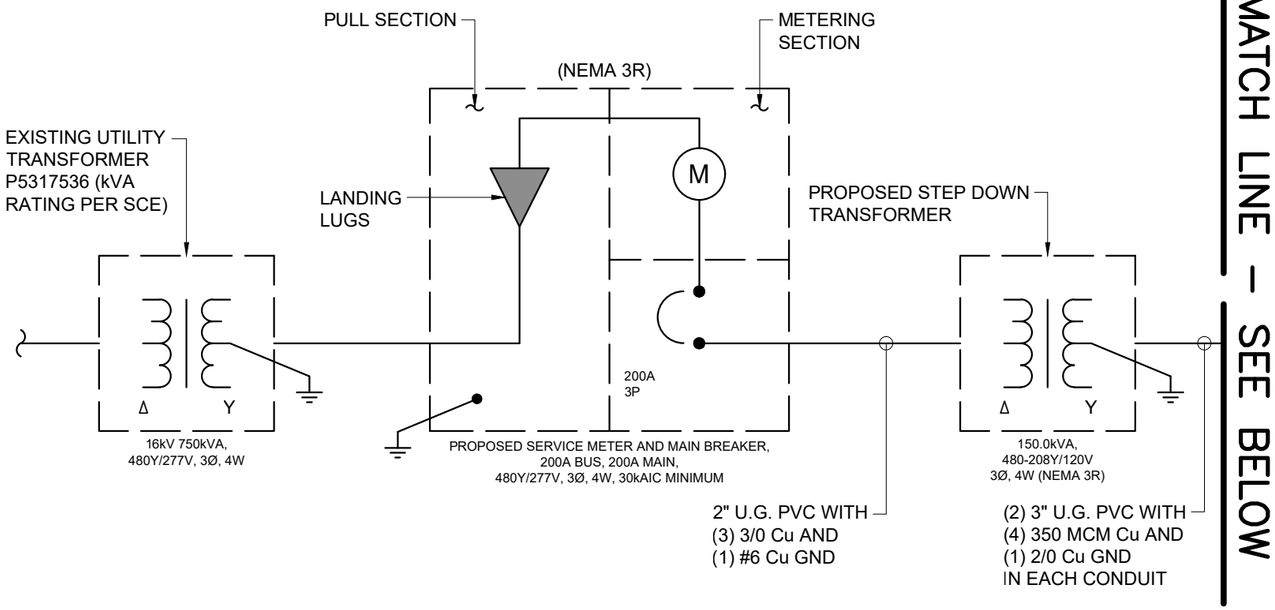
SCE CHARGE READY PROGRAM

00001349006 CITY OF GOLETA
EVSE SITE IMPROVEMENTS
CONCEPTUAL PLAN - REV 1

DR. BY AE
CH. BY CR
DATE 06-09-2022
SCALE: AS NOTED

SHEET NO. 1
OF 2 SHEETS

Drawing: P:\221-0223\Site\00001349006_CG\DD Phase\CP and SLD\00001349006_CG_cp.dwg; Layout1 Plot by: crios Jun 10, 2022 - 10:17am

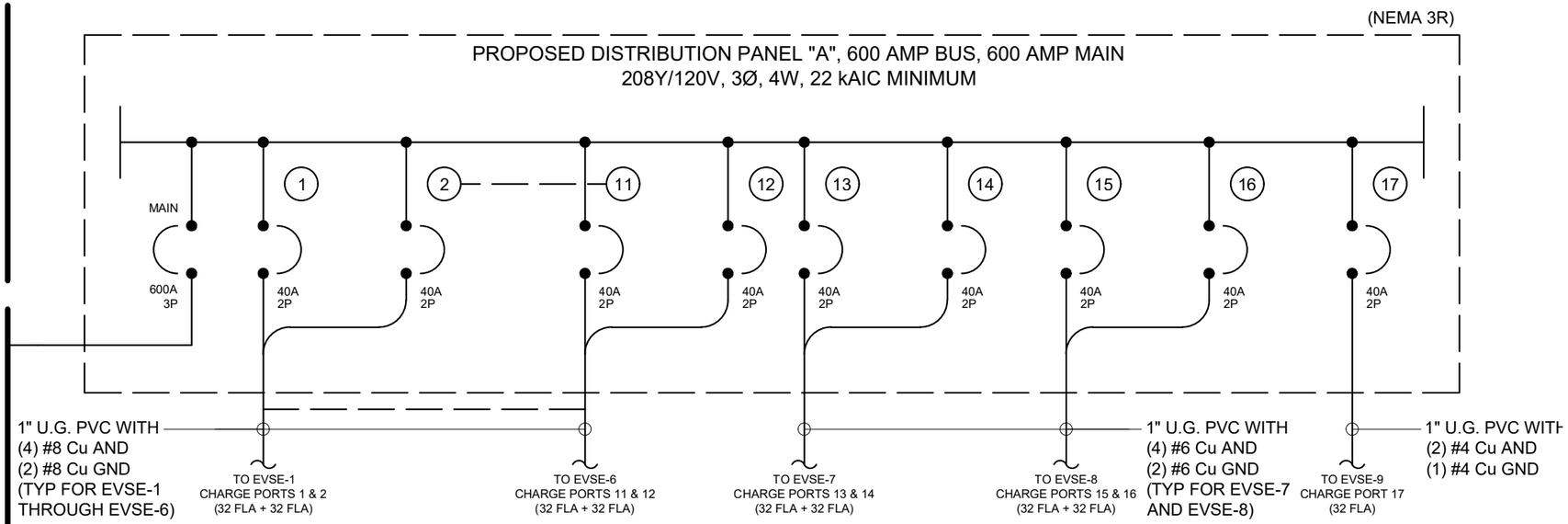


MATCH LINE – SEE BELOW

NOTES:

1. TOTAL CONNECTED 3-PH KVA: 119.11 KVA AT 0.95 PF
2. STANDARD RATED SERVICE PANELS, OVER CURRENT PROTECTION DEVICES AND WIRE SIZES BASED ON CEC/NEC REQUIREMENTS AT 125% CONTINUOUS LOAD. 100% RATED SERVICE PANELS, OVER CURRENT PROTECTION DEVICES AND WIRE SIZES BASED ON CEC/NEC REQUIREMENTS AT 100% CONTINUOUS LOAD.
3. TRANSFORMER LOADING BASED ON KVA REQUIREMENTS OF CHARGER AT 0.95 PF PER SCE (6.7 KVA/CHARGER).
4. (#), INDIVIDUAL CHARGE PORT NUMBER. THIS IS NOT BREAKER SPACE OR EVSE NUMBER. LOAD SCHEDULE INDICATES BREAKER SPACE FOR EACH CHARGE PORT.
5. (#)—(#), INDIVIDUAL CHARGE PORT NUMBER TYPICAL FOR PORTS (#) THROUGH (#).
6. PER CEC/NEC 210.19 (A) INFORMATIONAL NOTE #4, "CONDUCTORS FOR BRANCH CIRCUITS AS DEFINED IN ARTICLE 100, SIZED TO PREVENT A VOLTAGE DROP EXCEEDING 3 PERCENT AT THE FARTHEST OUTLET OF POWER, HEATING, AND LIGHTING LOADS, OR COMBINATION OF SUCH LOADS, AND WHERE THE MAXIMUM TOTAL VOLTAGE DROP ON BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST OUTLET DOES NOT EXCEED 5%."
7. ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) CAN BE DUAL CHARGE OR SINGLE CHARGE PORT DEPENDANT ON LOCATION SEE CONCEPTUAL PLAN AND SINGLE LINE FOR NUMBER OF CHARGE PORTS.
8. MAXIMUM VOLTAGE DROP FOR CONDUCTORS: #8 WIRE = 2.6%, #6 WIRE = 2.8%, #4 WIRE = 2.0%, 3/0 WIRE (480V) = 0.1%, 350 MCM WIRE (208V) = 0.2%
9. DIAGRAM ASSUMES CHARGER AND CONTROLLER ARE ONE (1) SELF CONTAINED UNIT.

MATCH LINE – SEE ABOVE



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SCE CHARGE READY PROGRAM

00001349006 CITY OF GOLETA
EVSE SITE IMPROVEMENTS
SINGLE LINE DIAGRAM - REV 1

DR. BY	AE
CH. BY	CR
DATE	06-09-2022
SCALE:	AS NOTED

SHEET NO. 2 OF 2 SHEETS

Drawing: P:\221-0223\Site\00001349006_CG\DD Phase\CP and SLD\00001349006_CG_SLD.dwg; Layout1 Plot by: crios Jun 10, 2022 - 10:18am

Charge Ready
Charging Infrastructure and Rebate
Participation Agreement

This Charge Ready Charging Infrastructure and Rebate Participation Agreement (Agreement) sets forth the terms and conditions for Program Participant to participate in the Program. Pursuant to the terms of this Agreement, SCE will (1) install the Infrastructure (as defined herein) at no cost to the Program Participant; and, (2) if applicable, remit the Charging Equipment Rebate, and/or the Maintenance and Networking Rebate after all terms and conditions have been met by the Program Participant.

All Program Participants are eligible for no-cost installation of the utility-side and Customer-Side Make-Ready Infrastructure.

Program Participant hereby agrees to the following terms and conditions of the Charge Ready Charging Infrastructure and Rebate Program (the "Program").

APPROVED CHARGING PORTS

1. **Total Number of Approved Charging Ports:**
   The commitment to procure and install the number of approved Charging Ports applies whether or not the Program Participant is eligible to also receive a rebate for the installed charging equipment, as SCE will design and install the Infrastructure based on this commitment.

The Program Participant is required to install the quantity and power level of approved Charging Ports set forth in this Agreement. Failure to procure and install the agreed upon number may lead to termination of this Agreement, at SCE's discretion.

Number of Charging Ports and Power Levels approved by SCE.

Power Level (L1) Port count: 1
Power Level (L2) Port count: 17
Power Level (DCFC) Port count: 0

2. **Rebates (if applicable):**
   2.1. **Charging Equipment Rebate**

If Program Participant is eligible to receive a rebate for the purchase and installation of charging equipment, the rebate amount paid to the Program Participant will be reduced to ensure that when combined with any other third-party rebates or incentives, the total rebate received by Program Participant does not exceed the Program Participant's total costs for procuring and installing the equipment. Following the successful installation of the Charging Equipment, the Program Participant will certify whether it has received any other third-party rebates or incentives, so that SCE can determine the appropriate rebate payment. The following table reflects that rebate values in effect at the time this agreement was issued:

Charging Infrastructure and Rebate	DAC Excluding Fortune 1000*	Multi-Family	Others Including Fortune 1000*
L2	$2,900	$1,450	$725

2.2. Maintenance and Networking Rebate

This rebate option is only available to Multi-Family Property sites located in a designated top quartile DAC. The rebate provides a one-time payment intended to offset the maintenance, networking and warranty costs associated with owning and operating L2 charging equipment. This rebate is intended to cover most of the costs associated with 10 years of the equipment's operation. The total rebate received by Program Participant will not exceed the Program Participant's actual costs.

APPROVED SITE LOCATION AND DESIGN

3. Description of Approved Location at the Site:

Brief description of the mutually approved location on the Program Participant's Site where Infrastructure will be installed.

Site Description: City of Goleta City Hall (Charging Infrastructure and Rebate Application; NOT Turn-Key Installation)

Site Address: 130 CREMONA DR, GOLETA, CA, 93117

4. **Conceptual Design of the Infrastructure deployment at Program Participant's Site:**

Program participant has reviewed and approved the Conceptual Design, as provided by SCE, showing the location within the Site where SCE will deploy the charging infrastructure. MAKE-READY INFRASTRUCTURE WORK

5. **The Make-Ready Infrastructure:**

If the Program Participant elects to have SCE install the entire Make-Ready Infrastructure, SCE will do so at no cost to the Program Participant. In this case, the Make-Ready Infrastructure will be part of the "Infrastructure" as defined in this Agreement.

☑ SCE-installed Customer-Side Make-Ready Infrastructure.

PROGRAM PARTICIPATION TERMS AND CONDITIONS

Program Participant agrees that its participation in the Program is subject to the following terms and conditions:

6. **Definitions:**

6.1. **AHJ – Authority Having Jurisdiction**: The responsible government entity having geographically-based jurisdiction that typically approves, inspects, and permits construction projects (e.g., City, County, Fire, Division of State Architect, etc.).

6.2. **Approved Product List:** The list of Charging Equipment qualified by SCE and meeting SCE's technical requirements. Program Participant must select Charging Equipment from the Approved Product List to receive applicable Charging Equipment Rebate (if available).

6.3. **Disadvantaged Communities as defined by CalEPA:** see Disadvantaged Communities.

6.4. **Charging Equipment**: Qualifying Charging Equipment that meets the technical specifications set forth by SCE. Charging Equipment that qualifies for the Rebate, if available, are listed in the Approved Product List, which can be found on SCE's website at www.SCE.com/APL. See also Power Levels.

6.5. **Charging Equipment Supplier:** The entity from which the Charging Equipment is purchased.

6.6. **Charging Equipment Rebate:** Financial reimbursement paid to an eligible Program Participant, or its designee, pursuant to this Agreement, to off-set a portion of the purchase of approved Charging Equipment.

6.7. **Charging Ports:** See Charging Stations.

6.8. **Charging Stations – EV Charging Equipment:** EV Charging Equipment interconnects with the electricity grid at a charging site to an electric vehicle, whether using alternating current (AC) or direct current (DC). An individual charging station unit may contain one or more charging ports for the purpose of connecting the electric vehicle to a grid connected power source capable of recharging the vehicle's battery pack. The individual connectors of the Charging Station are referred to as ports (referred to in this agreement as Charging Ports). Each charging station may charge one or more vehicles depending on the number of ports with which each unit is equipped. For dual-port stations, power cannot be throttled during non-DR events and each port must be able to deliver full power to both vehicles that are charging simultaneously. For example, a dual-port L2 station rated at 7.2 kW must be able to deliver 7.2 kW of power to both vehicles when two vehicles are charging simultaneously.

6.9. **Commitment Period:** The ten (10) year period where Program Participant must maintain all Charging Equipment in working order at the Site. The Commitment Period will commence on the In-Service Date of the Charging Equipment.

6.10. **Conceptual Design:** Map and related documents, as applicable, that show the proposed layout of the Infrastructure and Charging Equipment, including but not limited to, conduit routing and equipment placement.

6.11. **California Public Utilities Commission (CPUC):** The California state regulatory agency that is responsible for regulating privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies.

6.12. **CPUC's Transportation Electrification Safety Requirements Checklist**: The Safety Requirements Checklist applies to CPUC-Approved Transportation Electrification Programs and can be downloaded from: www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442458882

6.13. **Customer-Side Infrastructure:** See "Make-Ready Infrastructure."

6.14. **Customer-Side Make-Ready Rebate**: The rebate intended to offset a portion of the Participant's costs if Participant elects to perform the Customer-Side Make-Ready Infrastructure work, following the completed installation of the Make-Ready Infrastructure and submission of required documentation.

6.15. **Demand Response:** Demand Response (DR) programs encourage a reduction of electricity use during certain time periods, typically during on-peak hours or when demand for electricity is high, and/or can provide incentives to use electricity during periods of excess generation or when demand for electricity is lower.

6.16. **Disadvantaged Communities (DACs):** Census tracts in SCE's service territory with a top quartile score according to California Environmental Protection Agency's California Communities Environmental Health Screening Tool. SCE will use the current applicable version of the CalEnviroScreen tool to verify site status.

6.17. **Enrollment Portal**: The website where Program Participants can apply for the Program, check application status, and upload most required documents.

6.18. **Electric Vehicle Infrastructure Training Program (EVITP) Certification**: The document certifying an electrician has gone through the Electric Vehicle Infrastructure Training Program process. For more information, please visit https://www.evitp.org.

6.19. **Fortune 1000:** Fortune 1000 companies include companies listed on the Fortune 1000 list, subsidiaries of Fortune 1000 companies, corporate stores of Fortune 1000 companies, and international companies with annual revenue at or above the lowest cutoff point in Fortune 1000.

6.20. **Final Design:** Map and related documents, as applicable, that show the proposed layout of the Infrastructure and Charging Equipment, including but not limited to, conduit routing and equipment placement. The Final Design is the engineered construction drawing submitted for permitting and will be completed after this Agreement is executed and prior to start of construction.

6.21. **Final Invoice:** Statement of the total amount paid by Program Participant to Charging Equipment Supplier(s) for the purchase, and installation of the Charging Equipment.

6.22. **Grant of Easement**: A contractual agreement to grant right of way for SCE to construct, maintain, operate, and repair any SCE-installed infrastructure.

6.23. **In-Service Date:** The earliest date on which the EV Charging Equipment is installed and operational.

6.24. **Infrastructure:** The necessary Infrastructure on both the utility-side and customer-side of the electric meter (i.e., “make-ready”) that SCE will design, construct, and install at no cost to the Program Participant pursuant to this Program. Infrastructure, as defined herein, does NOT include (1) purchase or installation of the Charging Equipment; or (2) the customer-side portion of the Make-Ready Infrastructure, if the Program Participant elects the self-installed Customer-Side Make-Ready Infrastructure option.

6.25. **Make-Ready Infrastructure:** Infrastructure located on both the utility-side and customer-side of the meter is also referred to as the Make-Ready Infrastructure. The Utility-Side Infrastructure includes all infrastructure work from SCE’s distribution system to a new circuit panel that will be installed to support EV charging. SCE will always be responsible for designing, procuring, installing, and maintaining the necessary infrastructure located on the utility side of the meter. The Customer-Side Make-Ready Infrastructure includes all infrastructure from the new panel that will be set as part of the Utility-Side Infrastructure work, up to the first point of interconnection with the Participant’s Charging Equipment. Participants will have the option to have SCE perform the Customer-Side Make-Ready Infrastructure work or perform that work themselves and qualify to receive the Customer-Side Make-Ready Rebate.

6.26. **Make-Ready Rebate:** See Customer-Side Make-Ready Rebate.

6.27. **Multi-Family Property** (also referred to as multi-unit dwelling, or MUD). The definition for enhance rebate qualifying sites include:

6.27.1. **Residential properties** – Structures that are designed to accommodate two or more tenants with shared parking areas.

6.27.2. **Apartment Buildings** – Structure(s) containing two or more dwelling units that may also include common areas and facilities, e.g., entrances, lobby, elevators or stairs, mechanical space, walks, grounds, recreational facilities, and parking both covered and open.

6.27.3. **Retirement Communities, Townhomes, Condominiums** – Residential communities with shared parking areas managed by an HOA or an equivalent association.

6.27.4. **Mobile Home Parks** – Residential mobile home communities with shared parking areas.

6.27.5. **University & Military Housing** – Student or military housing units or apartments with individual cooking facilities (except conventional dormitories and barracks with cafeteria type kitchens).

6.27.6. **Timeshares** – Vacation property communities with shared parking areas managed by an HOA or an equivalent association.

6.27.7. **Public Parking with Dedicated Overnight Resident Passes** – Public parking lots designated for nearby multi-family residents for overnight parking. Charging Stations can be open for public use during day-time hours.

6.28. **Network Service Provider:** The third-party entity that will provide Network Services for the Charging Equipment. The Network Service Provider will be required to transmit port level data and other information to SCE complying with Program requirements.

6.29. **Ports:** See Charging Stations.

6.30. **Power Levels:** Charging Equipment Power Levels.

Level 1 (L1) Charging: Low power charging, typically at or below 120 volts.

Level 2 (L2) Charging: Medium power charging, typically delivered between 220 and 240 volts.

Direct Current Fast Charging (DCFC): Charging equipment that provide a high-power DC current, and for this program at least 50 kW, to the electric vehicle's battery without passing through any onboard AC/DC converter, which means the current is connected directly to the battery.

6.31. **Preliminary Design:** The set of engineered, working drawings of the Infrastructure. The design includes project specifications, conduit routing, electrical equipment specifications and calculations, project related Site improvements and construction details

6.32. **Program:** Also referred to as the Charge Ready Charging Infrastructure and Rebate Program. This Program is designed to help Program

Participants install the charging infrastructure needed to enable drivers to refuel their light-duty electric vehicles.

6.33. **Program Guidelines:** Program reference documents developed by SCE that provide program information, including but not limited to the program participation requirements.

6.34. **Program Participant:** The SCE non-residential entity that enters into this Agreement.

6.35. **Property Owner/Site Owner:** Individual or entity authorized representative of entity holding title in the Site where the Charging Equipment and Infrastructure will be located.

6.36. **Rebate Payment:** The payment made by SCE to Program Participant, or its designated assignee, after the eligible Program Participant procures and installs the Charging Equipment, meets the qualification requirements for the Customer-Side Make-Ready Rebate, and/or the Maintenance and Networking Rebate, in accordance with this Agreement, as verified by SCE, in SCE's sole discretion.

6.37. **Site:** The premises, owned, leased or operated by Program Participant, where the Charging Equipment will be installed.

6.38. **Time-of-Use (TOU) Rate Plans:** Rate plans which feature energy charges that vary based on the time of day, the day of the week, and the season. Some plans also include demand charges that are based on the maximum amount of electricity your business uses at once.

6.39. **Utility-Side Infrastructure:** See Make-Ready Infrastructure.

7. **Eligibility.**

Program Participant certifies that it meets, and will continue to meet throughout its participation in the Program, all eligibility requirements of the Program, including, but not limited to:

7.1. Program Participant is a non-residential SCE entity with at least one active service account.

7.2. The installation site is located in SCE's service territory.

7.3. Program Participant agrees to provide, or cause the Site Owner to provide, SCE with the rights of way across public or private property (as applicable) and to obtain any necessary permits to install Charging Equipment, without cost to SCE.

7.4. Program Participant will comply with all Program requirements outlined in the Charge Ready Program Guidelines.

8. **Additional Representations of Program Participant during the Term of the Agreement.**

Program Participant:

8.1. Program Participant agrees to purchase and install the Charging Equipment, as set forth in this Agreement. Program Participant agrees that the number of Charging Ports and their charging power level set forth in Section 1 cannot be modified after execution of this Agreement, without express written consent of SCE, at SCE's discretion.

8.2. All charging equipment must be selected from SCE's Approved Product List (APL) or otherwise approved by SCE for installation under this Program, in a quantity approved by SCE.

8.3. Program Participant agrees to have APL listed charging equipment installed by a qualified C-10 licensed and insured contractor.

8.4. Agrees to ensure their EVSE equipment installer follows all relevant State and local codes, and AHJ permitting requirements. All installed equipment must be correctly rated for the location where it will be installed (outdoor rated if applicable, conforming with ventilation requirements). The EV charging current shall not exceed 80% of the branch circuit rating. All EVSE installations must comply with the SB350 safety requirement checklist.

8.5. Agrees to ensure their EVSE equipment installer will not install and energize any EVSE or associated equipment capable of generation or bidirectional operation without Permission to Operate from SCE.

8.6. Agrees to procure, own, install, operate, and maintain the Charging Equipment in good working order at the site for a minimum of ten (10) years from the In-Service Date of Charging Equipment ("Commitment Period").

8.7. Agrees that, if at any time during the Commitment Period the Charging Equipment is replaced, only SCE approved EVSE will be installed and all associated costs will be the responsibility of the Program Participant.

8.8. Agrees to contract with a qualified electric vehicle charging equipment Network Service Provider approved by SCE to record and transmit EV charging usage and other data to SCE.

8.9. Program Participant authorizes SCE to act on Program Participant's behalf to voluntarily grant a Third Party access to receive information

relating to Charging Station data, billing records, billing history, pricing information, and all meter usage data used for bill calculation for all meters participating in this Program. This authorization expires ten (10) years from the Charging Equipment's In-Service Date.

8.10. Program participant authorizes the use of the collected Charging Station and related meter and billing data for regulatory reporting, program evaluation, industry forums, case studies or other similar activities, in accordance with applicable laws and regulations.

8.11. Acknowledges and agrees that the actual Make-Ready Infrastructure may vary from the Conceptual Design, if, in SCE's sole discretion, actual Site conditions or AHJ direction requires such changes.

8.12. Acknowledges that funding pursuant to this Agreement is only reserved after SCE receives a copy of this Agreement signed by Program Participant and Property Owner (if different from Program Participant). The Program Participant also acknowledges that reserved funding may be withdrawn, and SCE may terminate this Agreement, both in SCE's sole discretion, if Program Participant breaches the Agreement.

8.13. Agrees to comply with the established timelines and required documentation set forth in the Program Guidelines.

8.14. Represents and warrants that if Program Participant has applied for or received any other incentives or rebates for the Charging Equipment, Customer-Side Make-Ready Infrastructure, or Charging Equipment Maintenance and Networking program Participant shall notify SCE of any such incentives or rebates as soon as reasonably practicable. In the event that any such incentives or rebates, when combined with Program rebates, would reimburse Program Participant for more than 100 percent of their costs, SCE shall decrease the issued rebate amount if not yet paid, or if already paid, submit a reimbursement request to the Program Participant for the amount of the Rebate Payment exceeding 100 percent of the Participants costs.

8.15. Program Participant agrees that the electricity meter(s) associated with the EV charging equipment will be provided service under a TOU rate plan.

8.16. Participants must enroll in at least one qualifying Demand Response Program.

8.17. Agrees to ensure information of newly installed Charging Equipment, if accessible to the general public, will be registered with the US Department of Energy's Alternative Fuel Data Center (https://afdc.energy.gov/stations/#/analyze), and with the US Department of Energy's EV Charging Station Locations mapping tool, accessible at (https://www.afdc.energy.gov/fuels/electricity_locations.html#/find/nearest?fuel=ELEC), and that only one set of information is reported between the Program Participant and Charging Equipment Supplier.

8.18. Agrees to submit a completed IRS tax form W-9, and California Franchise Tax Board form 590 if applicable, or to provide line items from those forms as SCE may request, in order for SCE to process any Rebate Payment.

8.19. Represents and warrants that the execution and delivery of this Agreement, and the performance by Program Participant of its obligations under this Agreement, have been duly and validly authorized, and this Agreement is a legal, valid and binding obligation of Program Participant.

8.20. SCE, at its sole discretion and in accordance with its applicable tariffs, design standards, and AHJ permitting requirements, will locate, design, and install the utility-side, and possibly the customer-side Infrastructure depending on the Participants choice. SCE is responsible for all costs associated with Infrastructure deployed by SCE pursuant to this Agreement.

8.21. SCE will pay the Charging Equipment Rebate, if applicable, after SCE has verified correct installation of the Charging Equipment, consistent with this Agreement, subject to Program Participant meeting all Program requirements. The actual Charging Equipment Rebate Payment amount shall not exceed the actual reasonable costs of the Charging Equipment, and its installation, as set forth in the Final Invoice(s) and consistent with the Program Participant's contract with the Charging Equipment Supplier(s) and installers.

8.22. SCE will pay the Maintenance and Networking Rebate to qualifying participants following the installation of the Charging Equipment and subject to Program Participant meeting all Program requirements.

8.23. For sites that qualify to participate under the Multi-Family Property sites definition by providing Public Parking with Dedicated Overnight Resident Passes, Participant agrees to ensure that overnight parking will be

reserved and dedicated for nearby multi-family residents for the duration of the commitment period.

8.24. Agrees to participate in SCE sponsored customer satisfaction and other surveys following completion of the Project, upon request of SCE.

9. **Term and Termination:**

9.1. Term: The term of this Agreement shall begin upon the date that both Parties have signed the Agreement and end ten (10) years from the In-Service Date of the Charging Equipment, unless otherwise terminated earlier pursuant to this Agreement ("Term").

9.2. Termination: If the Program Participant fails to comply with any of the terms and conditions of this Agreement, SCE, in its sole discretion, may terminate this Agreement after sending Program Participant a notice of default that remains uncured for five (5) business days from receipt, except in the case of a safety or security violation, in which case, SCE may terminate the Agreement immediately and take all other necessary actions, including but not limited to, disconnecting power to the Charging Equipment, in SCE's sole discretion, to cure such safety or security violation(s).

9.3. Termination Costs: If this Agreement is terminated prior to the end of the Term because (1) Program Participant terminates its participation in this Program, (2) Program Participant, prior to the end of the Commitment Period, fails to install, or removes without replacing, the Charging Equipment or Program Participant-owned make-ready infrastructure, if applicable; or (3) SCE terminates this Agreement due to Program Participant's failure to comply with the terms and conditions of the Agreement, in accordance with Section 9.b. (Termination) hereof, the Program Participant shall pay (a) all costs actually incurred, or committed to be incurred, by SCE, as of the termination date, in connection with designing and deploying the Infrastructure at the Site; and (b) the Rebate Payment (if already paid). If the Charging Equipment or the Make-Ready Infrastructure, if applicable, are installed, the amount due to SCE for both (a) and (b) above will be prorated over a ten-year period, beginning from the In-Service Date of the Charging Equipment. SCE will invoice the Program Participant for such costs, and Program Participant shall pay such invoice within sixty (60) days of receipt.

10. **Indemnification and Liability; No Representations or Warranties**

10.1. Program Participant understands that SCE makes no representations regarding manufacturers, dealers, contractors, materials or workmanship of the Charging Equipment. Further, SCE makes no warranty, whether express or implied, including without limitation the implied warranties of merchantability and fitness for any particular purpose, use, or application of the products and services under the Program. Program Participant agrees that SCE has no liability whatsoever concerning (1) the quality, safety or installation of such products, including their fitness for any purpose, (2) the workmanship of any third parties, (3) the installation or use of the products. Program Participant hereby waives any and all claims against SCE, its parent companies, directors, officers, employees, or agents, arising out of activities conducted by or on behalf of SCE under the Program. Without limiting the generality of the foregoing, Neither SCE nor Program Participant shall be liable hereunder for any type of damages, whether direct, or indirect, incidental, consequential, exemplary, reliance, punitive or special damages, including damages for loss of use, regardless of the form of action, whether in contract, indemnity, warranty, strict liability or tort, including negligence of any kind.

10.2. Indemnification of SCE. To the fullest extent permitted by law, Program Participant shall, at SCE's request, indemnify, defend, and hold harmless SCE, and its parent company, subsidiaries, affiliates, and their respective shareholders, officers, directors, employees, agents, representatives, successors, and assigns (collectively, the "Indemnified Parties"), from and against any and all claims, actions, suits, proceedings, losses, liabilities, penalties, fines, damages, costs, or expenses, including without limitation reasonable attorneys' fees (a "Claim"), resulting from (a) any breach of the representations, warranties, covenants, or obligations of Program Participant under this Agreement, (b) any act or omission of Program Participant, whether based upon Program Participant's negligence, strict liability, or otherwise, in connection with the performance of this Agreement, or (c) any third-party claims of any kind, whether based upon negligence, strict liability, or otherwise, arising out of or connected in any way to Program Participant's performance or nonperformance under this Agreement. This indemnification obligation shall not apply to the extent that such injury, loss, or damage is caused by the sole negligence or willful misconduct of SCE.

10.3. Responsibility for Repairs. If Participant -installed equipment damages SCE-owned Infrastructure, Participant will be responsible for any costs associated with making any necessary repairs. If SCE identifies an improper installation of Participant-installed equipment, Participant agrees to pay for and be responsible for making any necessary corrections in the manner requested by SCE.

10.4. Defense of Claim. If any Claim is brought against the Indemnified Parties, Program Participant, at SCE's request, shall assume the defense of such Claim, with counsel reasonably acceptable to the Indemnified Parties, unless in the opinion of counsel for the Indemnified Parties a conflict of interest between the Indemnified Parties and Program Participant may exist with respect to such Claim. If a conflict precludes Program Participant from assuming the defense, then Program Participant shall reimburse the Indemnified Parties on a monthly basis for the Indemnified Parties' defense costs through separate counsel of the Indemnified Parties' choice. If Program Participant assumes the defense of the Indemnified Parties with acceptable counsel, the Indemnified Parties, at their sole option and expense, may participate in the defense with counsel of their own choice without relieving Program Participant of any of its obligations hereunder.

11. Miscellaneous

All Applicable Tariffs Apply. All applicable SCE tariffs apply to service provided pursuant to this Agreement, with the following exceptions:

11.1. Rules 15 and 16. Distribution Line and Service Extensions: Because SCE will design and install the Infrastructure at no cost to Program Participant, sections in Rules 15 and 16 that address applicant responsibilities or options are not applicable to Program Participants while participating in the Charge Ready Charging Infrastructure and Rebate Program. This may include, but is not limited to, allowances, contributions or advances, payments, refunds, and design and installation options. This exception does not apply to certain responsibilities found in Rule 16, such as, but not limited to, Section A.10, providing rights of way or easements; Section A.11, providing access to the location; and Section D.1, providing a clear route for the Service Extension.

11.2. Survival. Program Participant's obligation to pay Termination Costs and to indemnify the Indemnified Parties shall survive the expiration or termination of this Agreement.

11.3. Assignment. Program Participant shall not assign this Agreement without the prior written consent of SCE; to be granted or denied in SCE's sole discretion. Any assignment and assumption shall be in a form acceptable to SCE, in SCE's sole discretion.

11.4. All applicable SCE tariffs apply to service provided pursuant to this Agreement including, but not limited to, the applicable provisions of SCE's Charge Ready Program (CRP) Tariff Schedule filed with the California Public Utilities Commission. This Agreement shall be subject to such changes or modifications by the Public Utilities Commission of the State of California, as said Commission may, from time to time, direct in the exercise of its jurisdiction.

11.5. Should a conflict exist between the Charge Ready Program Guidelines and this Agreement, then this Agreement shall control with respect to such conflict.

11.6. Incentives and Rebates are taxable and if greater than $600 will be reported to the IRS unless the payee is exempt. SCE will report the rebate as income on IRS Form 1099. The payee should consult its tax advisor concerning the taxability of the Rebate Payment.

This Agreement can be signed electronically. If wet signature required, this Agreement can be downloaded and signed. Following signature, the Program Participant can upload the completed Agreement. SCE will verify for completeness and accuracy and will execute the Agreement and reserve funding accordingly.

AGREEMENT BY PROGRAM PARTICIPANT

By signing this document, you represent that the information provided in this Agreement is true, accurate and complete, and that you will comply with the terms and conditions set forth in this Agreement. You also represent and warrant that you are a duly authorized representative of Program Participant with the requisite authority to enter into this Agreement. For federal government Program Participants, you must be a Contracting Officer authorized to enter into this Agreement.

Name of Program Participant: GOLETA, CITY OF

Name of Program Participant Representative:

_____

Title of Program Participant Representative:

_____

I certify that the information provided is accurate and complete and that I have authority to sign this Agreement on behalf of Applicant.

_____

Signature

Date: _____

AGREEMENT BY PROPERTY OWNER (If Program Participant is the Property Owner, no separate signature is required.)

By signing this document, you represent and warrant that you are a duly authorized representative of the owner of the property on which the Site is located and that you have the requisite authority to consent to the use of the property in the manner set forth in this Agreement. You also represent that Property Owner hereby approves the installation and operation of the Infrastructure and the Charging Equipment, as well as any other necessary equipment to deploy the Charging Equipment pursuant to the Program as described in this Agreement. You further agree to execute the Easement Agreement within thirty (30) calendar days after Easement Agreement is provided by SCE.

Name of Property Owner Representative:

_____

Title of Property Owner Representative:

_____

I certify that I have authority to sign this Agreement on behalf of the Property Owner.

_____

Signature

Date:

Endnotes

CITY OF GOLETA
GREEN FLEET POLICY

Policy Statement(s)	The purpose of this policy is to implement sustainable fleet management and establish replacement and purchasing criteria to address operational needs while balancing fiscal priorities and environmental sustainability.
Policy Goal(s)	• Establish a "Zero Emission Vehicle & Hybrid First" priority structure for purchasing vehicles and equipment. • Increase the use of alternative fuel vehicles and equipment, with a focus on increasing the use of all-electric vehicles. • Enhance fleet management systems and implement new technology with an emphasis on reducing fossil fuel consumption. • "Right-sizing" the City's Fleet by maintaining, reducing, and limiting fleet assets. • Actively seek grants, rebates, and other financial incentives and funding opportunities to purchase ZEVs and implement electric charging or refueling infrastructure. • Comply with State and Federal Fleet Procurement mandates.[1]

[1] Including aggressive green fleet procurement mandates recently adopted by the California Air Resources Board under the Advanced Clean Fleets Initiative - https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets

DEFINITIONS

- **Battery Electric Vehicles (BEV):** are vehicles that use a battery pack to store the electrical energy that powers the motor. The batteries are charged by plugging the vehicle in to an electric power source.

- **Bi/Flex-Fuel:** are vehicles that can use either gasoline or natural gas in the same internal combustion engine. Both fuels are stored on board and the driver can switch between the fuels. The vehicle is equipped with separate fuel tanks, fuel injection systems, and fuel lines for both fuels.

- **Catastrophic Failure:** is the sudden or total failure of a vehicle or equipment where the cost of repair is 50% of the current value of the vehicle or piece of equipment or 25% of the replacement cost, or as determined by the General Services Director.

- **Equipment**: any mechanized device or tool that is serviced or maintained by the Fleet Services Program within the General Services Department.

- **ePTO:** an electric power take-off or ePTO is a way of electrically powering auxiliary functions or equipment on vehicles that traditionally sourced power from a combustion engine.

- **Fleet Asset**: any vehicle or equipment serviced or maintained by the Fleet Services Program within the General Services Department.

- **Fleet Replacement:** is the replacement of an existing vehicle or piece of equipment at a one-to-one ratio. The total number of assets managed by the City does not increase by replacing vehicles or equipment.

- **Fleet Expansion:** is an increase in the total number of vehicles or pieces of equipment. The total number of assets managed by the City increases to either address an existing deficiency or provide an expanded service level to the Community.

- **Green Vehicles:** are battery electric, hydrogen fuel cell, plug-in hybrid electric, and hybrid electric vehicles.

- **Gross vehicle weight rating (GVWR):** means the weight specified by the manufacturer as the loaded weight of a single vehicle.

- **Hybrid Electric Vehicles (HEV):** are vehicles that use both fossil fuels (gas, diesel, propane, natural gas, etc.) and electric energy to provide propulsion. The vehicle is fueled with gasoline to operate the internal combustion engine, and the battery is charged through regenerative braking, not by plugging in.

- **Internal Combustion Engine Vehicle (ICE):** a vehicle with a powertrain powered by gasoline, diesel, natural gas, propane, or other fuel where the sole source of power is from the combustion of the on-board fuel to provide motive power.

- **Plug-In Hybrid Electric Vehicles (PHEV):** are vehicles that use both fossil fuels (gas, diesel, propane, natural gas, etc.) and electric energy to provide propulsion. PHEVs can operate in all-electric (or charge-depleting) mode. To enable operation in all-electric mode, PHEVs require a larger battery, which can be plugged in to an electric power source to charge.

- **Total Cost of Ownership (TCO):** the purchase price of a particular asset plus the operation and maintenance costs over the asset's lifespan.

- **Vehicle**: any car, truck or piece of equipment that requires a valid driver's license to operate issued by the California Department of Motor Vehicles and is serviced or maintained by the General Services Department.

- **Zero-Emission Vehicle (ZEV):** a vehicle that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.

PROCEDURES

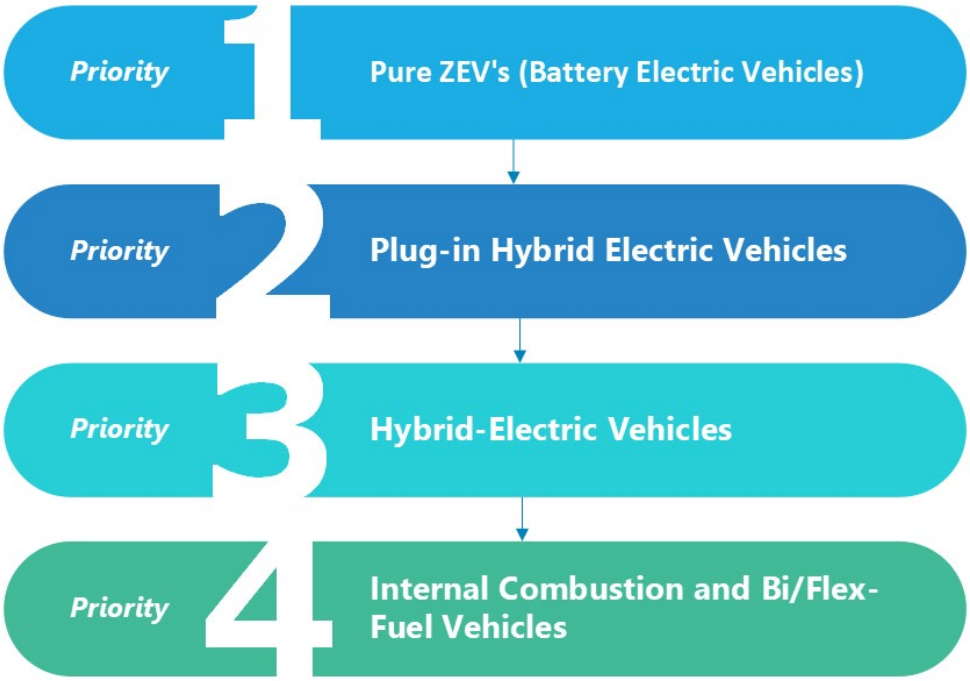
ZEV & Hybrid First Purchasing

The General Services Department will procure ZEVs for vehicle replacements and expansions when a suitable ZEV option is identified within equivalent operational capacity and where sufficient charging capacity exists to support the ZEV option. ZEV purchases shall be prioritized over comparable vehicles powered by internal combustion engines utilizing fossil fuels and flex-fuel or bi-fuel vehicles powered by petroleum-based fuels and other alternative fuels, such as ethanol.

- **Exemptions:**
  Departments may request an exemption from the ZEV replacement during the procurement process. All exemptions shall require approval by the Director of General Services and shall be considered based on vehicle criteria, including but not limited to:

  - Range Limitations: vehicle requested utilization exceeds the mileage range of the ZEV
  - Charging/Fueling Availability: vehicle requested is located with limited and/or unreliable fueling/charging stations
  - Cargo/Passenger Capacity: vehicle requested has a demonstrated need for cargo/passenger capacity that exceeds the capacity available
  - Special Performance Requirements: vehicles having special performance requirements necessary for the work to be performed.
  - Total Cost of Ownership: the TCO is more than 20 percent higher than the cost of an equivalent vehicle or motorized equipment powered by an internal combustion engine

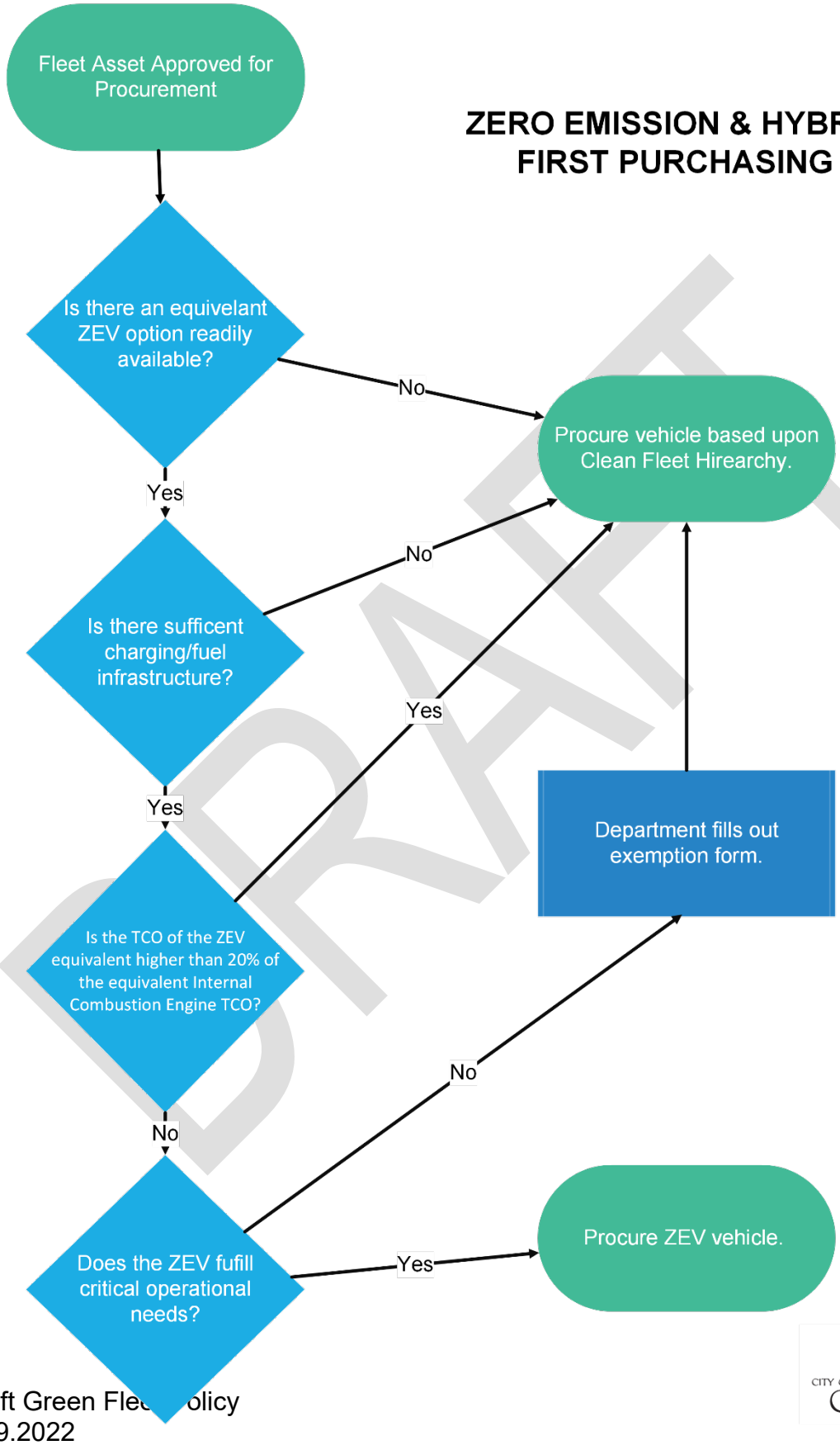
When an exemption request to a ZEV procurement is approved for a department, General Services shall select an alternative vehicle pursuant to the following priority structure:



Fleet Expansion

Fleet additions will be addressed during the annual budget development process Departments are responsible for submitting a Vehicle/Equipment Justification request to the Department of General Services during the budget process. General Services will review each request and recommend additions for Council approval.

The General Services Department will be responsible to procure the fleet equipment in concert with the requesting Department.


ZERO EMISSION & HYBRID FIRST PURCHASING
Fleet Asset Approved for Procurement
Is there an equivelant ZEV option readily available?
No
Yes
Procure vehicle based upon Clean Fleet Hirearchy.
Is there sufficent charging/fuel infrastructure?
No
Yes
Yes
Department fills out exemption form.
Is the TCO of the ZEV equivalent higher than 20% of the equivalent Internal Combustion Engine TCO?
No
No
Does the ZEV fufill critical operational needs?
Yes
Procure ZEV vehicle.
DRAFT

Fleet Replacement

A variety of factors influence the lifespan of a particular vehicle. However, the following age and mileage thresholds will guide the planned replacement of the City's vehicle inventory.

Category	Age	Mileage	Hours
Equipment			
Backhoe Loader	20	-	5,000
Mower	10	-	5,000
Skid Steer Loader	20	-	5,000
Tractor	15	-	5,000
Turf Sweeper	20	-	-
Woodchipper	15	-	5,000
Vehicles			
Heavy Duty Truck (Over 2 Ton)	10	100,000	8,000
Light Duty Truck (Under 1 Ton)	10	100,000	8,000
Medium Duty Truck (1 to 2 Ton)	10	100,000	8,000
Sedan	10	100,000	8,000
SUV	10	100,000	8,000
Van	10	100,000	8,000
Other Equipment & Vehicles			
ATV/UTV	12	-	5,000
Parking Enforcement Scooter	12	50,000	5,000
Portable Generators	20	-	4,000
Trailer	15	-	-

The Department of General Services will evaluate all vehicles and equipment that are due for replacement or have experienced a catastrophic failure. The following factors will be evaluated:

- **Compliance with existing laws or regulations:** Most all vehicles and equipment must comply with various local, state, and/or federal regulations. Replacement is accelerated in case of existing or predicted non-compliance. All efforts must be made to procure vehicles and equipment that will remain compliant throughout the asset's life cycle, but changes to regulations can dictate accelerated replacement of a mechanically sound asset.

- **Total and projected engine hours and mileage prior to replacement:**
  Vehicle mileage has been a primary measure used to predict replacement needs. With newer vehicle technology, the ability to track engine hours is more available. Although mileage targets should be considered in replacement decisions, engine hours can provide better insight into vehicle utilization and engine condition.

- **Age:**
  Vehicles and equipment consist of different systems that contain components such as seals, gaskets, computer modules, electrical wiring, rubber hoses, and protective coverings that deteriorate over time. Aged components can lead to ongoing and time-consuming repairs or cause major component failure. Older fleet assets may lack technological and performance advancements that improve operational efficiency, provide increased operator safety, and have older emissions systems that have greater impacts on the environment. Safety advancements with newer vehicles include backup cameras, blind spot assist and side impact airbags.

- **Repair Cost History:**
  Maintenance and repair costs influence the need to accelerate or extend the replacement of a fleet asset. The Department of General Services may recommend early replacement to eliminate high ongoing repair expenses and costly downtime. Vehicles with low historical maintenance and repair costs may not be replaced to reduce capital costs.

- **Use & Required Function:**
  The use of a vehicle is an essential factor in determining when and what type of replacement asset will be chosen. Some vehicles are operated in harsh working conditions and ways that cause significant wear. Underutilized vehicles are evaluated to determine whether they are required or can be reassigned to increase use. Vehicles of a smaller class size will be encouraged to achieve higher miles per gallon. The Department of General Services will collaborate with vehicle operators to determine whether a proposed vehicle can be downsized while performing its necessary functions.

Based upon the factors above, and in consultation with Departments, the General Services Director will determine fleet replacements to be implemented.

ADDITIONAL RESOURCES

Vehicle Justification Form
Clean Fleet Exemption Form
Vehicle Weight Classes & Categories

Vehicle Type	Description	Example
Battery Electric Vehicle (BEV)	Vehicles that use a battery pack to store the electrical energy that powers the motor. The batteries are charged by plugging the vehicle in to an electric power source.	2023 Chevrolet Bolt 
Plug-In Hybrid Electric (PHEV)	Vehicles that use both fossil fuels (gas, diesel, propane, natural gas, etc.) and electric energy to provide propulsion. PHEVs can operate in all-electric (or charge-depleting) mode. To enable operation in all-electric mode, PHEVs require a larger battery, which can be plugged in to an electric power source to charge.	2022 Ford Escape Plug-In SE 
Hybrid-Electric (HEV)	Vehicles that use both fossil fuels (gas, diesel, propane, natural gas, etc.) and electric energy to provide propulsion. The vehicle is fueled with gasoline to operate the internal combustion engine, and the battery is charged through regenerative braking, not by plugging in.	2022 Ford Maverick Hybrid 
Bi/Flex-Fuel	Vehicles that can use either gasoline or natural gas in the same internal combustion engine. Both fuels are stored on board and the driver can switch between the fuels. The vehicle is equipped with separate fuel tanks, fuel injection systems, and fuel lines for both fuels.	2022 Ford F150 FFV 

Internal Combustion Engine (ICE)	Vehicles with a powertrain powered by gasoline, diesel, natural gas, propane, or other fuel where the sole source of power is from the combustion of the on-board fuel to provide motive power.	2022 Cheverlot Silverado 2500, Service Body 
Electric Power Take Off (ePTO)	An electric power take-off or ePTO is a way of electrically powering auxiliary functions or equipment on vehicles that traditionally sourced power from a combustion engine. The system consists of an inverter and an electric motor powered by a DC power source, for example, a battery. Running auxiliary loads from the battery removes the need to idle the engine during PTO, which reduces fuel consumption, and eliminates air and noise pollution.	Altec SE JEMS ePTO Aerial Truck 

Item II: City Hall Electric Vehicle Charging Infrastructure & SCE Charge Ready

Presentation to Green Issues Standing Committee
October 12, 2022

Presentation by:
Dana Murray, Sustainability Manager
Angeline Foshay, Sustainability Management Assistant

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Presentation Overview

1. Purpose & Timeline

2. Program Participation

3. Conceptual Design

1. Purpose & Timeline

Purpose of Today's Discussion:

- Update on City Hall EV Charger project and SCE Charge Ready
  - Identify changes since March Green Committee meeting
- Consider Green Committee Recommendations to City Council:
  - Authorize participation in the SCE Charge Ready program (sign Participation Agreement)
  - Allocate ~$50,000 from the General Fund Unassigned Balance to cover professional services of an EVSE vendor to execute a 17-port EVSE "turn-key" package
  - Support RFP process and staff selection of EVSE vendor
  - Support staff efforts to apply for EVSE grants and rebates to offset City general fund contributions

City Plans & Programs

- Goal 1.1.3 in Strategic Plan: Support for EV infrastructure at City facilities

- 2022-23 PER Annual Work Program: EV Readiness Planning

Demand for EV Infrastructure

- Transportation accounts for over half of County's GHG emissions
- State goal: 250,000 EV Chargers to support 1.5 million ZEVs by 2025
- Santa Barbara County estimated need for public Level 2 Chargers by 2025: 972
  - Current Level 2 Chargers: 328

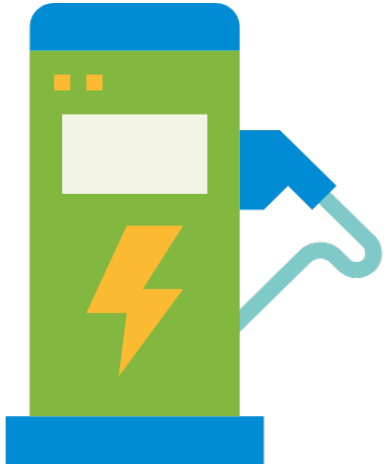
Timeline

- August 2021 – Staff submitted applications to SCE
- Nov-Dec 2021 – Preliminary approval for City Hall site & initial conceptual design drafted
- February 2022 – Conceptual design presented to Green Committee
- March 2022 – Recommendation by Green Committee for EV port increase (from 12 to 17)
- July 2022 – City receives updated conceptual design from SCE
- Aug-Sept. 2022 – City review of design, preparation of RFP

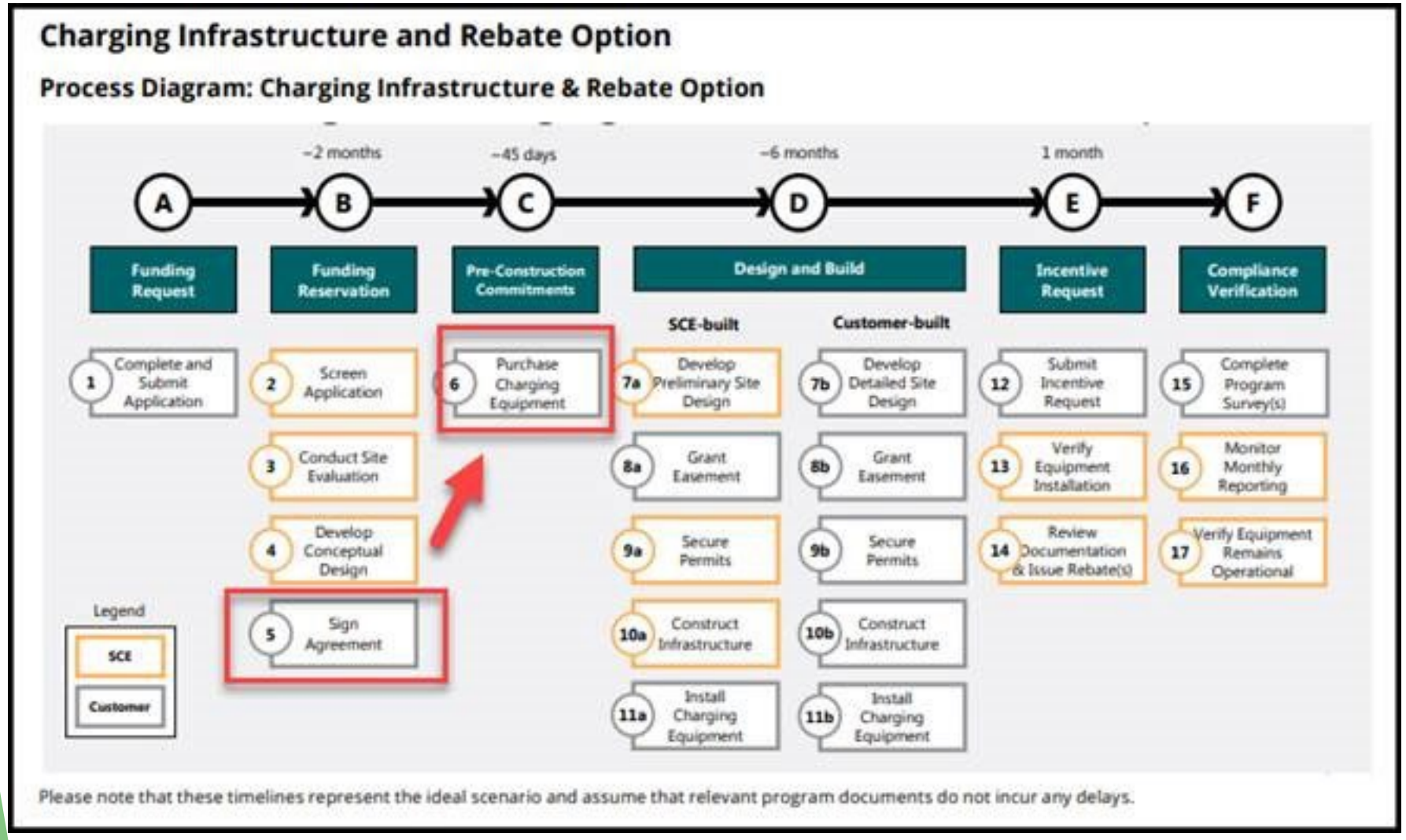
2. Program Participation – SCE Charge Ready

Charge Ready Program Terms

- 10-Year Participation Agreement
- Grant of Easement
- SCE Charge Ready Provides:
  - Designs and installs the "make-ready" infrastructure for free
  - Addresses ADA compliance
  - Rebates for EVSE per port
- City Responsibilities
  - Purchase and installation of EVSE
  - Networking for all chargers for program term
  - Operations and maintenance for program term
  - Enrollment in Demand Response Program



Program Process



Next Steps

- Sign Program Participation Agreement
- Upon execution by SCE, 45 days to demonstrate proof of purchase of EVSE
- Staff currently evaluating vendors via RFP process

Costs & Budget

- Should Council approve participation agreement, staff requests ~$50,000 from General Fund for 17 EVSE.
- Project has changed from 12 EVSE to 17, and from an estimated cost of $30,000 to $65,000 (increased cost due to installation, maintenance, warranties, and inflation).
  - Note: Cost is before any rebates and incentives (3CE, APCD, SCE, etc.)
- Staff will provide more accurate cost when EVSE vendor is selected through RFP process.

Budget Request

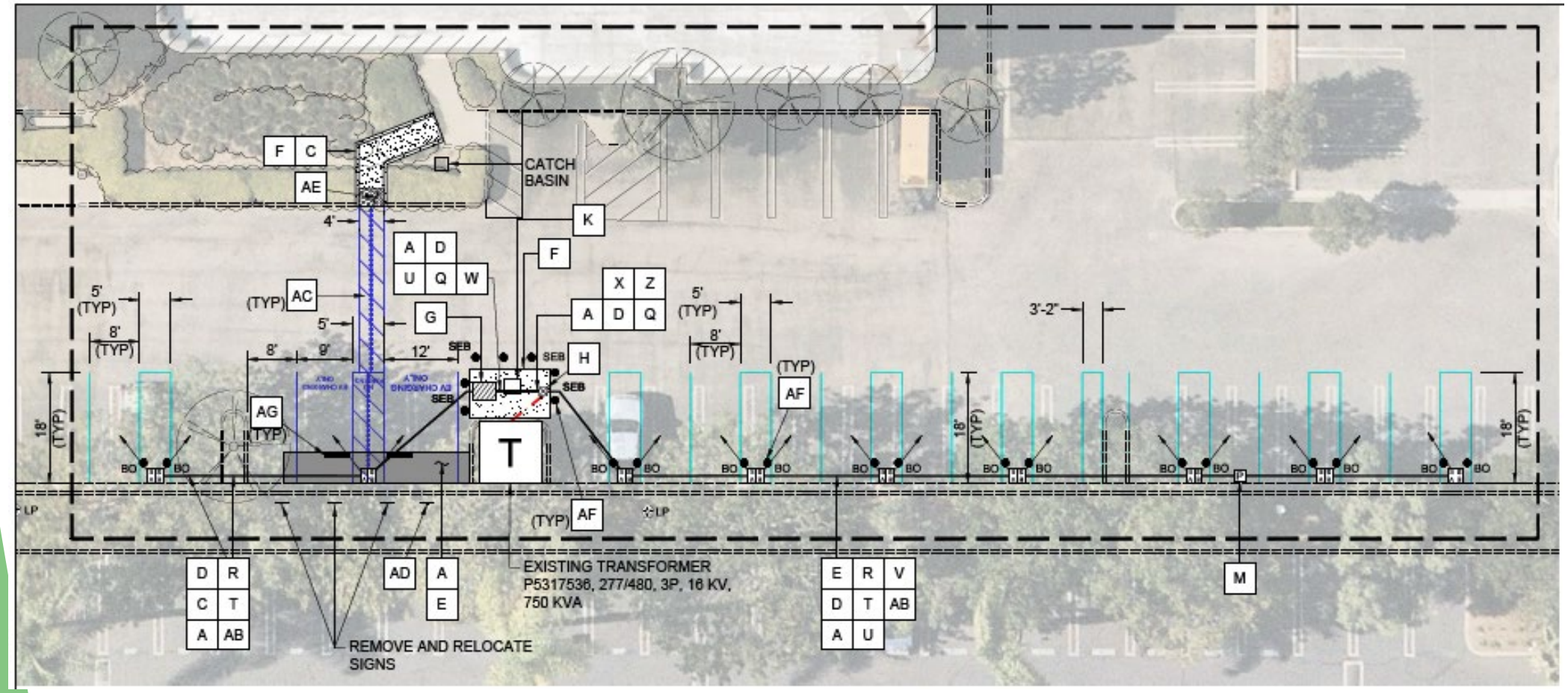
Goleta City Hall EV Charger Project, FY 22/23						
Fund Type	Account	FY 22/23 Current Budget	YTD Actuals	Appropriation	Total Available Budget	
General Fund	101-40- 4500-57010	$15,000	$15,000	$50,000	$65,000	
Total		$15,000	$15,000	$50,000	$65,000	

3. Conceptual Design

Key Elements

- 17 EV Chargers – 8 Dual Port & 1 Single Port
- 2 ADA Accessible Spaces – 1 Van & 1 Standard
- ADA accessibility improvements to the south entrance to City Hall
- Restriping will result in a net loss of 7 parking stalls
- SCE's work will be complete ~9-12 months after participation agreement signed

Conceptual Design



Recommendations Needed

- Staff seeks Committee direction on the inclusion of specific features that vary between EVSE vendors. These features include:
  - Cable retractors at ~$300 premium per charger (***Recommended by staff)***
  - EV charger card readers at ~$370 per charger plus $270 per year for operations and maintenance (***Recommended by staff)***

Recommendations Needed

Staff recommends that the Green Committee receive this update on the City Hall EV Charger project and SCE Charge Ready program, and:

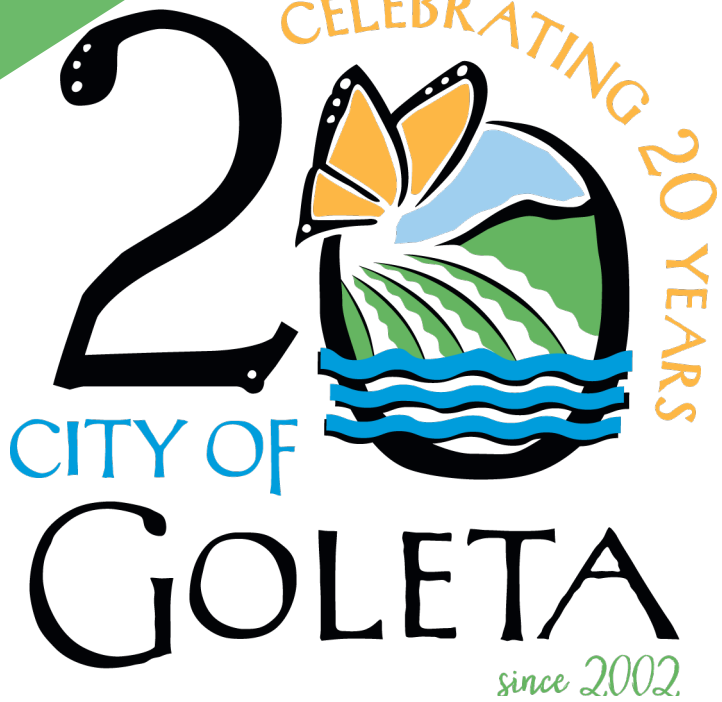
1. Recommend that the City Council authorize participation in the SCE Charge Ready program and the City Manager sign the program's Participation Agreement;
2. Recommend a budget allocation of ~$50,000 from the General Fund Unassigned Balance for the professional services of an EVSE vendor to execute a 17-port EVSE “turn-key” package;
3. Support RFP process and staff selection of the best fit EVSE vendor for the proposed Charge Ready project at Goleta City Hall; and
4. Support staff efforts to apply for EVSE grants and rebates to offset City costs.

Questions and Input

Item III: Green Fleet Policy

Energy and Green Issues Standing Committee

October 12, 2022



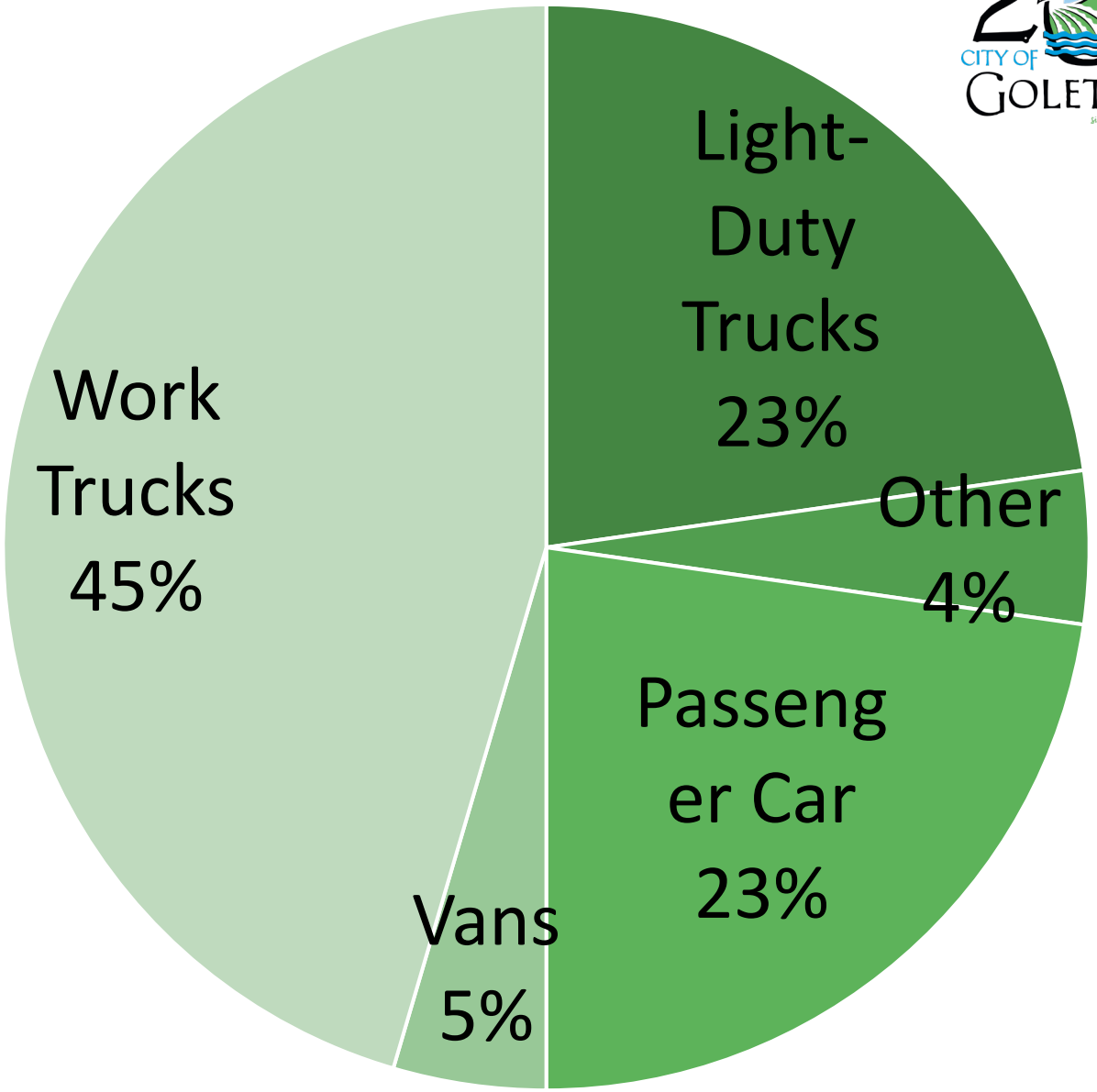
Presentation by:

Matthew R. Fore, General Services Director

Cassidy Le Air, Management Analyst

Current Fleet

- 13% Hybrid/EV
- 22 Vehicles
  - 10 Work Trucks
  - 10 Light-Duty Cars/Trucks
  - 1 Parking Enforcement
  - 1 Van



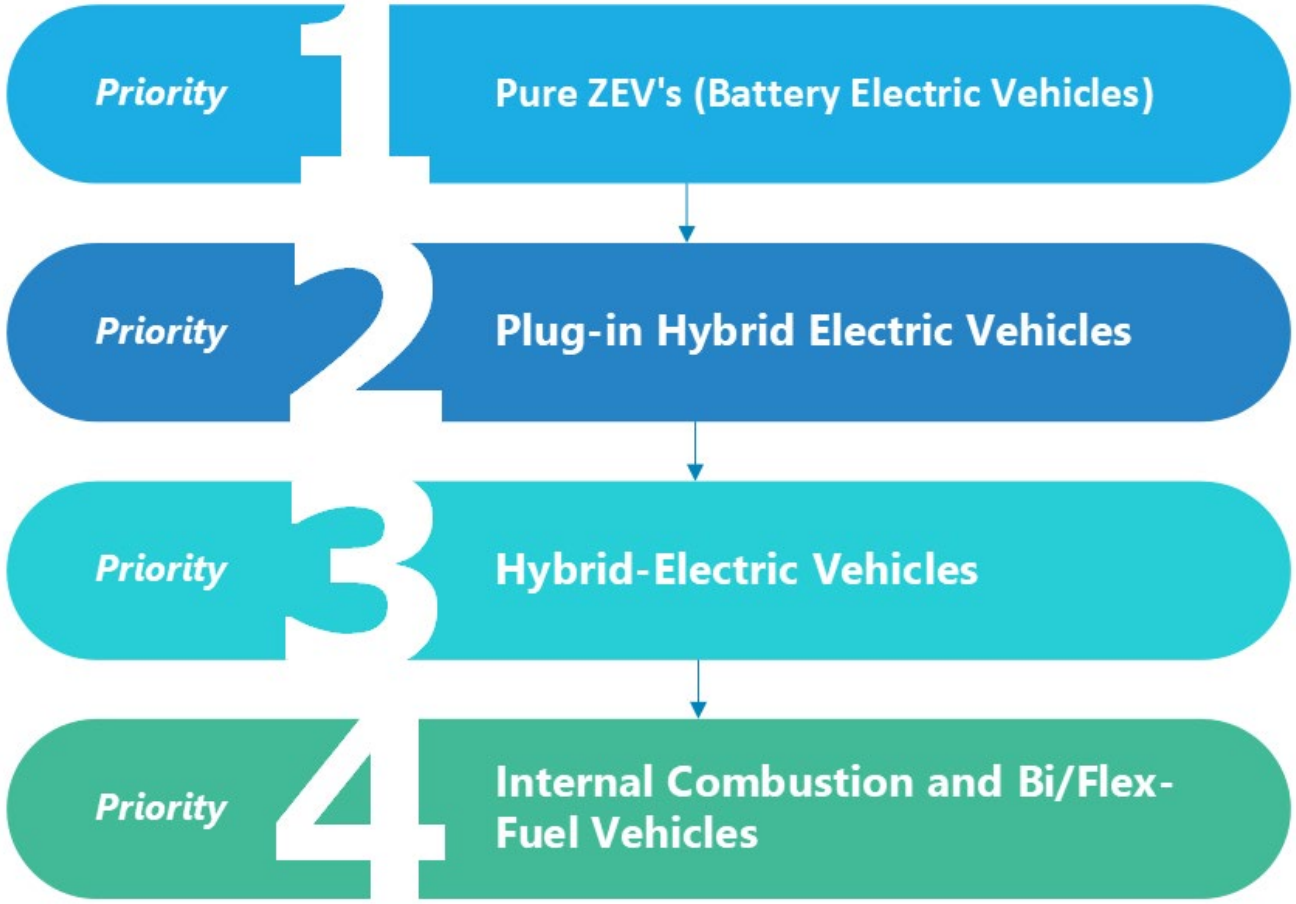
Current Landscape

- Aged fleet
- New positions
- Impacted supply chain
- Charging infrastructure
- Regulatory changes

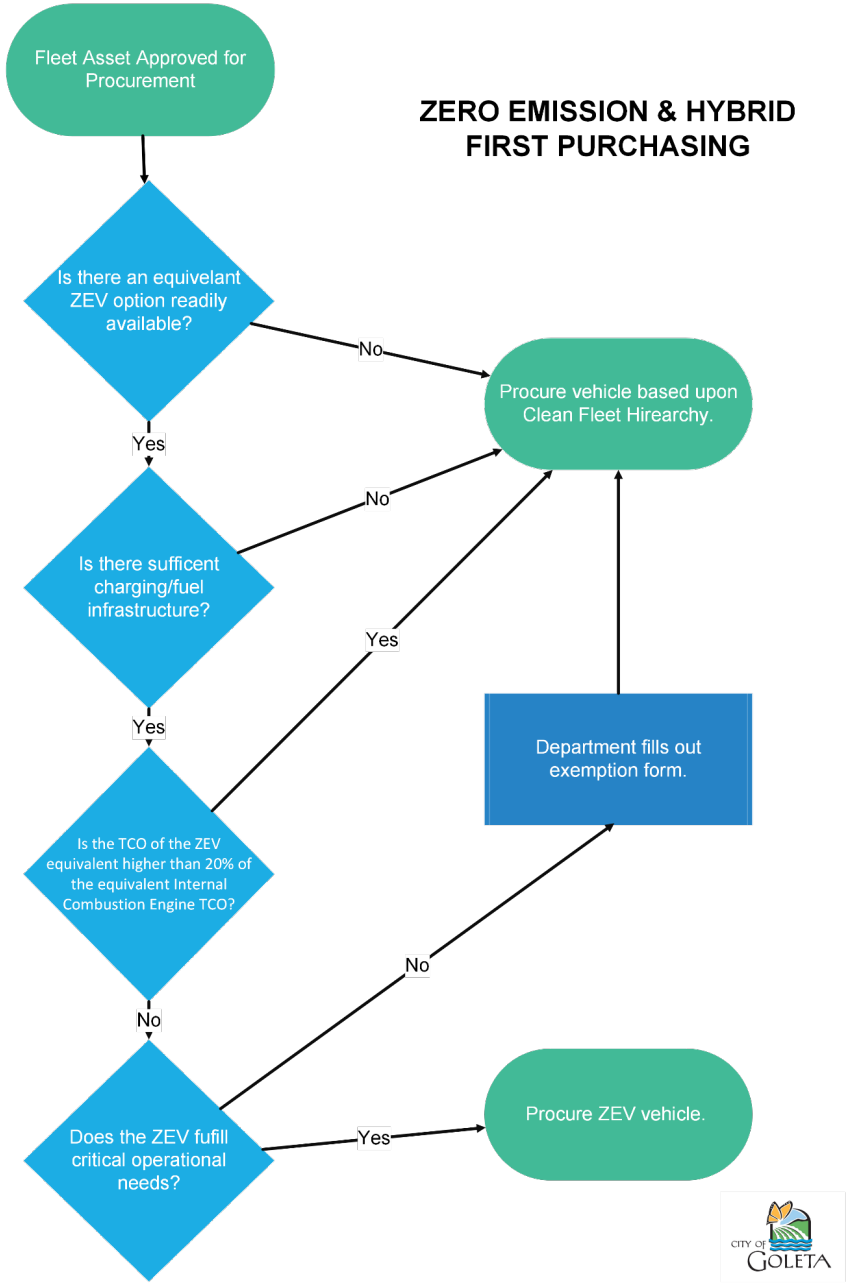
Green Fleet Policy

- Fiscal priorities and sustainability
- Guide immediate and future procurements
- ZEV & hybrid first purchasing
- Fleet expansion
- Fleet replacement

Clean Fleet Hierarchy



Decision Tree



Immediate Purchase Recommendations

Vehicle	User	Critical Specification	Staff Purchasing Recommendation	Infrastructure Needed to Support EV Option
SUV	Pool Vehicle	5 Passenger	Plug-in hybrid electric; Toyota Rav-4 (*or similar*)	Level 2 Charging
Light-Duty Truck	Public Works	Toolbox, Light bar	Battery-electric; Ford Lightning F-150 (*or similar*)	Level 2 Charging
Sedan	Pool Vehicle	Light bar	Plug-in hybrid electric; Toyota Prius Prime (*or similar*)	Level 2 Charging
Aerial Lift	Public Works	Aerial lift	Trailer mounted lift to be towed with existing vehicle	N/A
Service Trucks (4)	Public Works, General Services	Service body, Towing capacity	Procure "standard" (internal combustion) vehicle; continue to expand charging infrastructure to support future vehicles	Level 2/3 Charging

Next Steps

- Council to consider adoption of Green Fleet Policy
- Execute immediate vehicle purchase recommendations
- Plan and pursue additional charging infrastructure
- Adapt policy as EV markets develop and charging infrastructure expands
- Right size City fleet

Questions & Input

ITEM IV: REACH CODE AND BUILDING ELECTRIFICATION

Presentation to the Energy Green Issues Standing Commitee

October 12, 2022

Presentation by:

Angeline Foshay, Sustainability Management Assistant

Dana Murray, Sustainability Manager

Peter Imhof, Planning and Environmental Review Director

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Overview

1. Purpose & Background

2. Reach Code Pathways

3. Electric Vehicle Components

Reach Codes & Building Electrification

- Purpose of item discussion:
  1. Committee receives background on Reach Codes and Regional Collaboration.
  2. Provide recommendation on policy pathway to pursue a reach code requiring all electric new construction.
  3. Provide recommendation on whether to pursue an EV reach code.
- Significance of an All-Electric Reach Code and EV Reach Code:
  - Catalyze the electrification of new buildings
  - Reduce the use of fossil fuels in buildings
  - Improve indoor air quality
  - Decrease hazards to public safety in buildings
  - Support the electrification of the transportation sector

City Plans & Programs

- 2021-23 Goleta Strategic Plan
  - 1.1.4. Explore adoption of a "Reach" Building Code
  - 1.1.5. Continue to work with the Santa Barbar County Regional Climate Collaborative to shar resources to address climate change
- "Reach Codes" identified by Council as the top priority for Sustainability's upcoming projects during the 2022-23 PER Annual Work Program process

State Law

- Senate Bill 32: California set targets to reduce statewide GHG emissions to:
  - 40% below 1990 levels by 2030
  - 80% below 1990 levels by 2050
- California Air Resources Board's 2022 Scoping Plan provides an implementation pathway to meet the State's carbon reduction goals
  - Recommends all-electric buildings for residential construction starting in 2026 and non-residential construction starting in 2029

Building Emissions

- Buildings are responsible for ~25% of CA's GHG emissions; 40% of Goleta's community-wide emissions
- CA cities rapidly implementing plans to cut pollution from homes and buildings to meet the State's energy targets for new construction, aiming to achieve zero-net-energy (ZNE) for all:
  - New residential and municipal buildings by 2025
  - New non-residential buildings by 2030
- ZNE is netting out a building's annual energy usage to zero by providing offsetting renewable energy and energy efficient buildings.
- Policy mechanism to achieve ZNE:
  - California Energy Code - energy efficiency and renewable energy requirements
  - California Green Building Standards Code - requires that builders use energy-efficient technologies and construction practices.

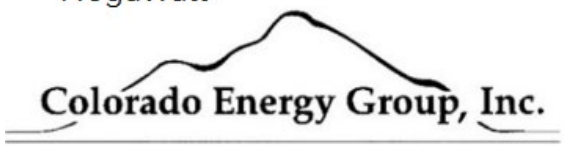
Regional Collaboration

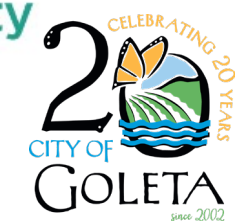
- Jurisdictions Developing Policy

one COUNTY one FUTURE

- Technical Assistance

NegaWatt





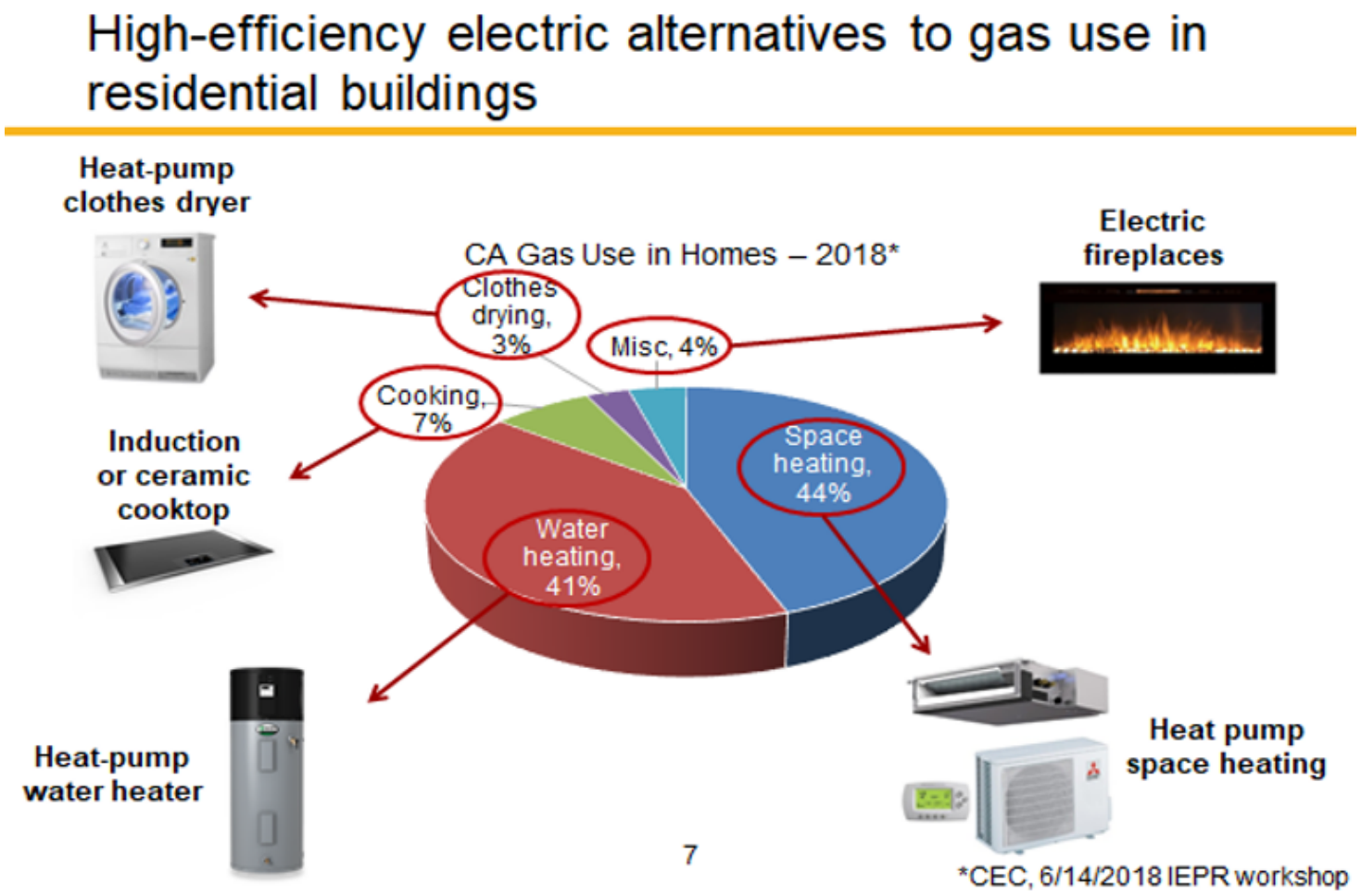
Reach Codes

- A local building energy code that "reaches" beyond state minimum requirements for energy use in building design and construction
- Designed to encourage low-cost all-electric new construction of healthier, efficient, safer, and zero emission buildings.

Benefits of Electrification

- Significantly reduced GHG emissions
  - Compounded further by the greening of state electricity systems
- Improved indoor air quality
  - 60% of homes in the state that cook at least once a week with a gas stove produce toxic levels of nitrogen dioxide, formaldehyde, and carbon monoxide, which would exceed even outdoor air quality standards.
- Reduced hazards in the event of natural disasters
- Reduced construction costs

Efficient Electric Appliances



Reach Code Pathways

Pathway 1: Electric-Preferred Policy

- Would amend the California Energy Code to incentivize all electric new construction, and require mixed fuel buildings to maintain higher efficiency than the base 2022 CBSC
  - More challenging to implement
  - Would require cost effectiveness study
  - After adoption by City Council, this amendment would require approval from the California Energy Commission
  - Would require renewal every 3 years per the changing CBSC
  - Lower GHG emission savings

Pathway 2: All-Electric Policy via CALGreen

- Develop a reach code via amending CALGreen standards, requiring all-electric fuel sources for new construction of buildings
- After adoption by City Council, this amendment would require approval from the California Energy Commission
- Would require renewal every 3 years per the changing CBSC

Pathway 3: All Electric Policy via Municipal Health & Safety Amendment

- Utilizes jurisdictional authority to amend Goleta Municipal Code Chapter 8 Health & Safety to prohibit any new gas infrastructure (hookups or piping) for new construction
  - Longest lasting option, would not require renewal and can be adjusted over time
  - Would not require CEC submission and approval
  - Would create regional consistency with City of Santa Barbara (in process), County of Santa Barbara (adopted), and City of Carpinteria (in process)

Staff Recommendation

Options for Adoption

New Construction Ordinance Approaches

	Efficiency	Electric-Preferred	Option #1 Electric Only	Option #3 Electric Only	Option #2 Electric Only Plus Efficiency
			Natural Gas Moratorium	Electric Only	
Mechanism	Energy Code	Energy Code	Jurisdictional authority (e.g., Health and Safety)	CALGreen	(Jurisdictional authority or CALGreen) plus Energy Code
Requirements	All new construction exceeds minimum energy code	Only mixed fuel buildings exceed minimum energy code	No new gas infrastructure (Hookups or Piping)	All new construction is electric only	All new construction is electric only AND exceeds minimum
Considerations	Simplicity Preserves choice Specific measures	Preserves Choice Lower GHG Savings	Longest Lasting	Must be renewed	Biggest impact Must be renewed

Electric Vehicle Charging Reach Code

Electric Vehicle Charging Requirements

- Would help Goleta further electrify our transportation sector, which accounts for over 55% of City's emissions
- Increased EV infrastructure requirements in a reach code can provide critical charging infrastructure for housing and workplaces, meeting the growing gap in EV charging demand and availability
- Pathway: Amend CALGreen minimum requirements for EV capable, EV ready, and EVSE spaces in new construction
    - Would require CEC approval and re-adoption every three years

Image from County of Santa Barbara

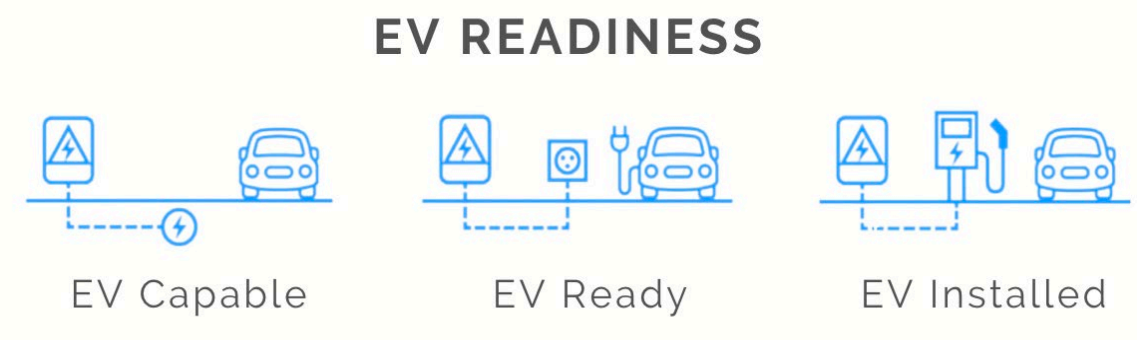
Levels of EV infrastructure

Image from Southern Alliance for Clean Energy

- **EV Capable Space:** a parking space that has an installed electrical panel capacity with a dedicated branch circuit and a continuous raceway/conduit from the panel to the future EV parking spot.
- **Level 2 EV Ready Space:** a parking space that has installed electrical panel capacity, raceway/conduit and wiring to terminate in a junction box or 240-volt charging outlet such that Electrical Vehicle Charging Equipment (EVSE) can be directly plugged into it without additional work.
- **Electric Vehicle Charging Station (EVSE):** a parking space that includes an installed and operable Level 2 EV charging station.

2022 Building Code Requirements for EV Infrastructure in New Construction

- Residential Single-Family homes (1-2 family homes and townhomes with garages):
  - **New Construction:** all spaces must be "EV capable"
- For 3+ multi-family dwellings, hotels, and motels:
  - **New Construction:**
    - 10% of parking spaces must be EV capable
    - 25% must be EV Ready with low power Level 2 receptacles
    - 5% of parking spaces in buildings with 20+ units require Level 2 EVS installed



Pursuing EV Reach Codes in Goleta

- Recommend staff research EV Reach Codes and develop options for Goleta
  - Many jurisdictions have adopted different EV-specific reach codes to encourage the adoption of EVs in new construction
    - Ex: Berkeley, San Luis Obispo, Encinitas, Palo Alto, Los Angeles, Santa Monica, etc.
  - Can adopt an EV reach code by making CALGreen Tier 1 or Tier 2 "voluntary provisions" mandatory for EV infrastructure in new construction
    - Simpler approach, provisions already developed
- Present options and findings to Green Committee for recommendations at December meeting

Recommendations Needed

- Green Committee provide recommendations on Reach Codes, specifically:
  1. Recommend building electrification policy pathway.
     - Staff recommends that the City pursue the municipal health and safety ordinance policy pathway to prohibit natural gas infrastructure in new construction, additions, and major alterations (Option 3).
  2. Recommend that the City pursue an electric vehicle charging component of the Reach Code to encourage transportation electrification.

Questions & Input

October 12, 2022 Green Issues Standing Committee Meeting