

**Building Standards Commission & Division of State Architect**

- 1. Administration of the Title 24 Code Adoption Process:** Collaborate with regulation-proposing and expert agencies to advance building standards for increased ZEV infrastructure for the installation of electrical charging equipment and future development.

Lead Program: BSC

Key Collaborators: DSA, CARB, HCD, CEC, CPUC, GO-Biz

Key Results and Actions:

- Execute and complete the 2021 Triennial Code Adoption Cycle including advancing EV regulations through the California Green Building Standards Code with focus on increasing the requirements for EV charging in nonresidential occupancies (BSC) and public K-12 schools and community colleges (DSA): *Adopted December 2021. Publication in July of 2022 and effective application on January 1, 2023.*

***Completed-**Published the 2022 CALGreen code on July 1, 2022, with an effective date of January 1, 2023.*

***Key updates include:** 1. increased EV infrastructure for light-duty vehicles in non-residential occupancies from 10% to 20% with a requirement that 25% of the EV capable spaces, infrastructure only, be provided with Level 2 Electric Vehicle Charging Equipment (EVSE). 2. Increased Voluntary Tier 1 measures from 15% to 30% and, Tier 2 from 20% to 45%. Allow the use of Direct Current Fast Charger (DCFC) and Automatic Load Management System (ALMS) to comply with the new EVSE requirements. 3. New EV infrastructure requirements for medium-duty and heavy-duty vehicles for warehouses, grocery stores and retail stores with planned off-street loading spaces.*

- Development with key ZEV collaborators of advanced electric vehicle provisions for non-residential applications throughout the state in the 2022 Intervening Code Adoption Cycle.

- Reassess EV charger percentages based on public comments during the 2021 Triennial Code Adoption cycle. (DSA & BSC)

*This item was considered during the pre-cycle activity workshops held between April and September 2022. BSC did not receive documentation or research during the workshops suggesting EV percentages be increased. In response to the workshops, BSC is proposing EV regulations that allow more EV compliance options, such as low power level 2, DCFC expanded allowance, and an alternative power allocation method.*

*BSC will collaborate with CARB, CEC and may consider percentage increases in a future rulemaking code cycle. Workshop feedback also suggested that the EV infrastructure regulations should be repealed and only require the installation of EV chargers.*

- Introduce EV charger additions and alterations triggers for non-residential occupancies undergoing modifications. (BSC)

Department of General Services  
2022 ZEV Market Development Plan (UPDATED)

*This item was considered during the pre-cycle activity workshops and BSC is proposing EV regulations for specific additions and alterations for nonresidential buildings during this 2022 Intervening Code Adoption Cycle.*

- Introduce EV charger additions and alterations triggers for public schools and community colleges undergoing parking area modifications. (DSA)
- Review automatic load management systems with the intent to develop a reference listing standard. (BSC)

*This item was discussed and considered during the pre-cycle activity workshops and upon further review a reference standard proposal was not proposed during the 2022 Intervening Code Adoption Cycle.*

*BSC may consider reviewing this topic in future rulemaking code cycles.*

- Consider amending EV regulations based on dwell times for key occupancies e.g., grocery stores and retail stores. (BSC)

*BSC considered this topic and while BSC did not specifically propose EV regulations for key occupancies, BSC is proposing EV regulations based on a power allocation method that allows design professionals and developers the option to use a combination of charging equipment that can be customized based on the project's needs e.g., low power level 2, level 2 or DCFC.*

*BSC may further research dwell times for key occupancies in future rulemaking code cycles.*

- Consider EV Ready (low power Level 2 EV charging receptacles) provisions to align with the Department of Housing and Community Development along with the EV Ready space signage. (BSC)

*BSC is proposing EV regulations for low power Level 2 charging and EV signage during this 2022 Intervening Code Adoption Cycle.*

**Lessons learned:** *It is essential to have interested parties and affected stakeholders present at the pre-cycle workshops to develop balanced proposals. BSC initially considered EV regulations for Level 1 charging and because of comments heard at the meetings, low power Level 2 charging was selected as the preferred option.*

c. Agency Action Plan 2022

- Conduct workshops to gather input from subject matter experts and ZEV advocates to develop code changes and additions and alteration triggers for non-residential occupancies (BSC) and public schools and community colleges undergoing parking area modifications (DSA). *Spring of 2022.*

**Completed:** *BSC conducted pre-cycle activity workshops between April and September 2022 and obtained input from subject matter experts, ZEV*

*advocates, and interested parties. As a result, BSC is proposing EV regulations for additions and alterations. See above items for additional BSC actions.*

- Submit code changes to the California Building Standards Commission (CBSC) for the 2022 Intervening Cycle. December of 2022. (BSC & DSA).

**Completed:** *BSC submitted EV code proposals to CBSC in early December 2022 and is currently preparing rulemaking documents for the GREEN Code Advisory Committee meetings to be held February 8-10, 2023.*

- Code Advisory Committee review in Spring of 2023. Public comment phase in late Spring of 2023 to create the supplement for ZEV standards in the Green Building Standards Code (CALGreen). Effective for use July 1, 2024. (BSC & DSA).

**Pending:** *CBSC will conduct the GREEN Code Advisory Committee meetings on February 8-10, 2023. Public comment phase in late Spring of 2023. CBSC Commission approval hearings will be held Summer 2023.*

## Procurement Division

- 2. ZEV Procurement and Distribution:** Enable non-state public entities to leverage state contracts to purchase ZEVs and supporting equipment.

Lead Program: DGS' Procurement Division; Office of Fleet and Asset Management

Key Collaborators: State fleet owning agencies, Local and Regional Government; NGOs; Air Districts

Key Results and Actions:

- a. Local & Regional Government Use:** Local government agencies are currently permitted to use Leveraged Procurement Agreements (LPAs) for ZEVs and supporting equipment. Local government spend from LPAs are tracked through monthly usage reports submitted by the contractor.
  - This action has been implemented and will continue to be ongoing. All ZEVs and related contracts are available to local government agencies and may be utilized now. *A Request for Proposal (RFP) was released in October 2021 for light duty fleet vehicles. New contracts were awarded in April 2022 and included a total of 22 ZEVs, and seven plug-in hybrid electric vehicles. Additionally, solicitation development is in progress for medium-heavy duty ZEV vans and trucks. Contract awards are anticipated to be made in June 2023. Implementation Ongoing.*

## Office of Sustainability

- 3. Fleet and Workplace Infrastructure:** Lead state government efforts to install fleet and workplace charging to enable and support accelerated fleet electrification.

Lead Program: Office of Sustainability

Key Collaborators: All agencies and departments with fleets; DGS Real Estate Division

Key Results and Actions:

- a. Continue to hold "EV Charging Leadership" quarterly meetings in 2022 for state agencies and departments to learn about opportunities for EV charger installations at their facilities, DGS Office of Sustainability Transportation Unit's EV charging infrastructure budget, and how to partner to take advantage of various utility and other EV charger make ready and charger rebate programs. **Timeline: December 31, 2022, Metric: 4 meetings**
  - *Three "EV Charging Leadership" meetings were held on the following dates: April 14, July 21, and October 20, 2022. (A previous meeting was held on December 16, 2021, so only 3 meetings were held in 2022.) The topics of discussion included MD/HD ZEV availability, a calculator to determine charging times and electrical capacity need for MD/HD ZEVs and several MD/HD ZEV charger incentive programs. Also covered was demand response and EV chargers, demand charges, special EV rates, flex alert and ELRP protocols as well as advanced "networking management services."*
- b. Purchase and distribute up to 40 "EV Arcs" (mobile, non-grid tied solar powered generators with Level 2 chargers) to state agencies and departments with fleet ZEVs. **Timeline: December 31, 2022, Metric: 40 EV Arcs**
  - *Thirty-seven EV Arcs were purchased in 2022 with a total of 75 charging ports.*
- c. Continue the planning, project development and installation of over 900 Level 2 EV charging ports at various state facilities for both fleet and workplace charging. Also consider DC fast charging when appropriate particularly for medium- and heavy-duty ZEVs that will be added to the state fleet. **Timeline: December 31, 2022, Metric: 900 Level 2 charging ports**
  - *Four hundred and ninety-nine Level 2 charging ports were installed at state departments in 2022. (We continued to experience supply chain issues and had 2 staff members out of 5 move on to other positions.)*
- d. Implement new EVSE policy for leased facilities. Review and approve each department's Fleet Storage and EVSE Plan Certification for leased facilities to determine required number of EV charging ports. Work with RESD to provide adequate charging infrastructure necessary to support fleet ZEVs at all leased facilities. **Timeline: June 1, 2022 Metric: policy implemented**
  - *We are ready to implement the new EVSE policy for leased facilities. We participated in discussions with RESD and OFAM and updated the necessary forms and worksheet to determine the required number of EV charging ports at future leased EVSE project sites.*
- e. Update the OS-1 Review process (SAM 4121.6) to mirror the leased facilities process (Fleet Storage and EVSE Plan Certification) based on gas vehicles being

replaced and existing ZEVs. This process will determine the required number of EV charging ports for each state facility as well as review and approve new ZEVs in a department's Fleet Acquisition Plan (FAP). **Timeline: November 1, 2022 Metric: OS-1 forms and process updated and implemented before the next FAP cycle**

- *The OS-1 Review process was changed to mirror the leased facilities process and has been successfully used along with an updated OS-1 Worksheet since November 1, 2022.*
- f. Update EVSE assessment process. Develop a new pre-survey for state departments wishing to have the DGS OS-Transportation Unit perform an assessment for potential EV charging infrastructure projects at their facilities. The pre-survey will take into consideration the number of both fleet and workplace ZEVs anticipated at the facility over the next 3 years and a justification showing their overall need. **Timeline: May 1, 2022 Metric: pre-survey developed and used on all new assessments**
- *A pre-survey was developed and is being used as part of site assessments for new EVSE projects. It has been helpful in identifying actual fleet/workplace charging needs for sites upfront, prior to a full assessment.*
- g. Continue internal and external outreach to educate stakeholders about the DGS OS-Transportation Unit's EV charging infrastructure program. **Timeline: on-going 2022 Metric: 4 presentations to stakeholders about the program.**
- *Four presentations by the Office of Sustainability's were given to the following groups: OS All Staff meeting on October 17, 2022, the Sustainable Building Working Group on October 11, 2022, the DGS Management Team Meeting on August 18, 2022 and the Green Roundtable on March 21, 2022 about OS Clean Transportation Unit's EVSE infrastructure program.*

**4. Fleet and Workplace Infrastructure (cont.):** Identify opportunities and encourage use of public hydrogen stations.

Lead Program: Office of Sustainability

Key Collaborators: Office of Fleet and Asset Management, Governor's Office of Business and Economic Development, California Energy Commission, California Air Resources Board

Key Results and Actions:

- a. Continue to stay abreast of technological changes and best practices in hydrogen fueling to be prepared for future state fleet hydrogen fueling infrastructure.
- *A staff member attended the California Hydrogen Leadership Summit June 6-7, 2022 and gleaned important information on the state of hydrogen in the state.*

- b. Collaborate with OFAM and GO-Biz, CEC and CARB to Determine how to leverage public hydrogen stations to meet charging needs for state fleet, based upon location and volume of need. **Timeline: On-going Metric: on-going information and collaboration of hydrogen fleet charging at public stations**

- *OS, OFAM and GO-Biz met October 21, 2022 to discuss hydrogen fueling in the state including current issues affecting the state fleet and future trends. We will continue to collaborate on this important topic.*

5. **Fleet and Workplace Infrastructure (cont.):** Complete new strategy to address post-pandemic workplace charging needs in anticipation of accelerated EV adoption California.

Lead Program: Office of Sustainability

Key Collaborators: California Energy Commission

Key Results and Actions:

- a. Work with the CEC to forecast new workplace charging needs as well as appropriate charger specifications at state facilities taking into account both a post-pandemic reality and increasing EV adoption by consumers and state employees in light of the Governor's Executive Order N-79-20. **Timeline: Summer 2022. Metric: new workplace charging goal in place**

- *We worked with the CEC to forecast new workplace charging needs and determined that the existing goal of 5% workplace charging across the state was reasonable in light of both the post-pandemic reality and increasing EV adoption by consumers and state employees.*

### Office of Fleet and Asset Management

6. **Procurement Policies:** Implement additional vehicle procurement policies for the state fleet to meet and/or exceed the timelines outlined in EO N-79-20 and in the Climate Groups ZEV Pledge for public fleets.

Lead Program: Office of Fleet and Asset Management

Key Collaborators: All state fleet owning agencies, Department of Finance, and California Air Resources Board.

Key Results and Actions:

- a. Establish a ZEV Fleet Stakeholder Group comprised of state fleet managers and DGS, procurement staff to explore and collaborate on ways to accelerate adoption on ZEVs within the state fleet to meet purchasing and fleet composition goals mandated in EO N-79-20 and the state's ZEV Pledge. **Target, develop and issue statewide policy that phases out the purchase of internal combustion engine passenger vehicles and sets new ZEV purchasing goals for light duty and medium and heavy-duty vehicles (for all non-public safety applications) by June 30, 2023.**

Department of General Services  
2022 ZEV Market Development Plan (UPDATED)

1. *This initiative is ongoing.*
2. *Informal Stakeholder Group with representatives of big 8 fleet managers met in 2022 to create new timelines for purchasing requirements needed to meet ZEV purchasing goals.*
3. *Formal Stakeholder Group to include additional fleet managers and DGS procurement staff to be established by March 31, 2023.*
4. *New ZEV procurement policies for the state fleet will be issued by December 31, 2023.*

7. **Petroleum Reduction:** Pursue strategies to reduce the state fleet's petroleum consumption by 50% (from 2015 levels) by 2030.

Lead Program: Office of Fleet and Asset Management

Key Collaborators: State fleet owning agencies, Department of Finance, CalHR

Key Results and Actions:

- a. By December 31, 2022, implement telematics-based control measures intended to reduce overall state fleet fuel consumption, with a goal of reducing consumption by eight percent by July 1, 2023.
  - *This initiative is ongoing.*
  - *The statewide telematics policy was issued in April 2021, with a requirement that all state agencies have telematics installed by February 1, 2022.*
    - *Due to supply chain issues that delayed full deployment of telematics a compliance letter was sent to departments without a telematics order in place in March 2023. The letter required State agencies to submit their internal telematics policy and implementation plan for full compliance.*
  - *Telematics installations have been temporarily suspended due to a cease and desist issued by California Air Resources Board to GeoTab, the state's telematics vendor, on May 23, 2022.*
  - *As of December 2022:*
    - *39,313 telematics devices have been ordered.*
    - *21,892 telematics devices have been activated*
  - *Total outcome for consumption tracking delayed; however, OFAM is analyzing current data on assets with telematics installed.*
- b. **Explore the use of the fuel efficiency improvement product, SmartPedal, on all state fleet assets. Prior to statewide deployment of the product, DGS will conduct a pilot program on DGS owned vehicles. Target is to evaluate the fuel efficiency findings of the pilot program vehicles by September 1, 2022 with a goal increase in fuel efficiency of seven percent.**
  - *This initiative is ongoing.*
  - *SmartPedal was installed on 218 DGS owned assets.*
  - *Initial pilot testing was completed December 31, 2022.*
  - *Results analysis was on target for July 2, 2022.*

Department of General Services  
2022 ZEV Market Development Plan (UPDATED)

- *Collaborated with SmartPedal and determined that it was the best interest of the State to further analyze results and establish parameters for the pilot program to gather the most accurate results.*
  - *Established parameters that include collecting an additional six months of data, establishing study parameters, and utilizing additional data samples from telematics devices.*
  - *New target to complete evaluation and identify fuel efficiency findings by July 1, 2023.*
- c. Eliminate all non-essential, light-duty vehicles from the state fleet through a fleet utilization evaluation. **Target is to complete the analysis and reduction by December 31, 2025.**
- Based on DGS' analysis of state fleet utilization during the pandemic, it has seen significant reductions in the light duty portion of the fleet that necessitate an analysis and potential rightsizing of state agency fleet assets in the light duty segment of the fleet.
    - i. *OFAM is currently conducting fleet utilizations on light duty assets for state departments that have fleet acquisition plans submitted.*
    - ii. *Light duty utilization analysis criteria and instructions provided to departments in November 2022.*
    - iii. *DGS will obtain a consultant to conduct a full fleet evaluation for all departments by December 31, 2024 to complete analysis and reduction by December 31, 2025.*
  - By December 31, 2022, issue management memo setting criteria and procedures for state fleet evaluation.
    - i. *Criteria and procedures will be issued once the consultant is in place.*
  - By June 30, 2023, upon achievement of obtaining 12 months' worth of fleet data from telematics for the light duty fleet, begin the fleet utilization evaluation with target to complete on June 30, 2024.
    - i. *This initiative delayed until telematics installations are completed, currently paused due to cease and desist issued by California Air Resources Board to Geotab, the State's telematics vendor.*

- 8. ZEV Procurement and Distribution:** Develop policies to encourage ZEVs retired from the state fleet directly benefit communities most in need.

Lead Program: DGS' Procurement Division; Office of Fleet and Asset Management

Key Collaborators: State fleet owning agencies, Local and Regional Government, NGOs, Air Districts

Key Results and Actions:

- a. Establish connections with equity NGOs and government agencies administering programs that offer incentives for the sale and purchase of ZEVs in priority communities to learn about their programs and potential inclusion of surplus state fleet vehicles. **Target completion date of September 1, 2022.**



Department of General Services  
2022 ZEV Market Development Plan (UPDATED)

- *Due to unforeseen priorities and existing limitations for fleet vehicles, this initiative was postponed.*
  - *Outreach was conducted with the Bay Area Air Quality Management District and the Sacramento Air Quality Management district.*
- b. Develop and implement a process and necessary agreements whereby state agencies may include their surplus ZEVs in incentive programs for disadvantaged communities. **Target completion date is December 2023.**
- *Met with Clear Cars for All and continued limitations were identified, such as the exclusion of fleet vehicles from current rebate programs and age and mileage program specifications that do not align with current fleet makeup.*
  - *DGS will restart work with AQMD's to work through limitations and develop a process by December 31, 2023.*
- c. Form a workgroup of fleet managers to assess the outcomes of participation in the program and to develop, if warranted, statewide policy mandating the use of such programs. **Target completion date is December 31, 2023.**
- *This is pending development of a first draft of the proposed process.*
9. **VMT Reduction:** Develop and maintain programs to reduce state worker vehicle miles traveled and enable shifts to less impactful (transportation) modes.

Lead Program: Office of Fleet and Asset Management

Key Collaborators: CalHR, State Controller's Office, all state agencies

Key Results and Actions:

- a. Develop and implement an affordable and flexible daily parking rate at six of DGS' managed parking facilities which tracks, incentivizes, and rewards, through integrated technology services, the use of alternative modes of transportation for commute purposes. **Target is to complete the initial rate development and implementation by December 31, 2022.**
- *A standardized daily parking rate was successfully implemented in eight DGS managed parking facilities.*
  - *An agreement with the City of Sacramento to utilize their Parking Access and Revenue Control System technology that will allow for online tracking and management of daily parking was successfully implemented.*