Department of General Services (DGS)

2023 Highlights & Lessons Learned

- Developed and proposed CALGREEN EV code changes for the 2024 Triennial Code Adoption Cycle.
    - Lessons learned: Coordinating with other state agencies during the building code pre-cycle activities is useful for modifying and augmenting code proposals.
- Five Statewide Contracts awarded on October 18, 2023, for ZEV School Buses to support fleet electrification efforts in local school districts.
- Office of Sustainability's Clean Transportation Unit purchased 21 EV Arcs (42 Level 2 charging ports) for eight state departments and installed 441 Level 2 charging ports in 2023.
    - Lessons learned: Education and outreach are increasingly important both internally and externally for state departments as EV charging technology advances and additional opportunities for load and energy management are more widespread.
- Office of Sustainability's Clean Transportation Unit collected $432,953.03 in charger incentives in 2023. This funding will be reinvested back into future EV charging projects.
- Under the cease-and-desist order on the original telematics installation method, DGS continued to encourage state agencies to install telematics using the CARB-approved secondary installation method. The state's overall telematics implementation rate is above 70 percent, and DGS completed telematics installation on a total of 515 DGS-owned assets in 2023.
- Completed a pilot to test onboard telematics systems from two major OEMs and validated that the state's contracted telematics vendor offers more efficient and effective telematics services.
- Established a partnership with local air quality districts to strategize the state's surplus ZEV distribution.
    - Lessons learned: The current program does not meet the business needs of vehicle dealerships. Collaboration with CARB and air districts will be essential to discuss more sufficient incentives for the participating dealerships.

Building Standards Commission

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:

a. Advance EV regulations via the 2024 Triennial Code Adoption Cycle (Continued)

2023 Targeted Key Results: Develop and propose CALGREEN EV code changes for the 2024 Triennial Code Adoption Cycle.

- ***Outcome:*** *In advancing EV regulations,* BSC conducted various EV workshops from October 2023-January 2024 during the pre-cycle activities. BSC Submitted its CALGreen EV proposed code changes, which were heard by the GREEN Code Advisory Committee in March 2024. BSC is currently revising the CALGreen EV proposal in preparation for the 45-day public comment period.

2024 Targeted Key Results: Continue with the current rulemaking process with the objective to obtain commission approval and adoption of the BSC EV proposals in December 2024.

b. Development with key ZEV collaborators of advanced electric vehicle provisions for non-residential applications throughout the state in the 2024 Triennial Code Adoption Cycle (Completed)

2023 Targeted Key Results:

- Reassess EV charging percentages based on comments received during the 2022 Intervening Code Adoption cycle (pre-cycle activities) specific to office and retail employee charging needs using Low power Level 2.
    - **Outcome:** BSC staff reassessed and determined that only allowing low power level 2 was not practical for office and retail occupancies.
- Consider amending EV regulations to address the difference between workforce and customer charging based on dwell times for key occupancies e.g., office buildings and retail stores.
    - **Outcome:** BSC Amended the EV capable tables to create a separate column for office and retail stores that allow for low power level 2 and other charging compliance options with increased percentages to address dwell times.
- Consider amending EV regulations to repeal EV capable charging spaces requirements in favor of installed charging stations in alignment with the Department of Housing and Community Development's recent proposal.
    - **Outcome:** BSC staff reconsidered this 2023 targeted key result and determined that repealing the EV capable charging space requirements in its entirety was not practical.
- Consider amending EV regulations to require a higher percentage of EV capable charging spaces to be converted to installed charging stations.
    - **Outcome:** Amended the EV regulations to require a higher ratio of installed chargers versus EV capable spaces. This increase also applies to the voluntary Tier 1 and Tier 2 measures.

- Develop a state agency group to assess overall EV needs to implement AB 1738 objectives for nonresidential additions and alterations.
    - **Outcome:** The CALGreen Electric Vehicle Workgroup (CEVW) was convened to include BSC, HCD, CEC, CARB, and other relevant stakeholders to assess overall EV needs. The outcome resulted in amended existing EV regulations for nonresidential additions and alterations to clarify the build-out of existing infrastructure prior to adding new EV capable infrastructure.
- Consider increasing panel and conduit size for low-power level 20 amp EVSE to accommodate the installation of full power level 2 at 40 amps to future-proof the upgrade from Low-Power Receptacles to level 2 EV Charging.
    - **Outcome:** Amended the EV regulations to require that the panel and conduit to be sized for a 40-amp circuit needed for future level 2 charging upgrades.
- Pursuant to AB 2075, convene a workshop on EV charging infrastructure standards that includes HCD, DSA, CARB, CEC, and other relevant stakeholders to consider, among other things, projected demand for EV charging infrastructure based on the state's goals, as specified.
    - **Outcome:** Conducted three CALGreen EV Workgroup (CEVW) workshops from October 2023-January 2024 which included the state agencies listed above, stakeholders and interested parties.
- BSC is considering amending electric vehicle charging stations (EVCS) to add a new section for EVSE Receptacle regulations to comply with NEMA standard configurations in alignment with HCD's existing code language. BSC is also considering proposing new code language for EV charger connectors.

    Outcome: Added a new code section to address the EV connectors to align with similar Department of Housing and Community Development (HCD) amendments for consistency.

c. Agency Action Plan 2023 (Continued)

2023 Targeted Key Results:

- Conduct workshops to gather input from subject matter experts and ZEV advocates and utilize the CALGreen EV Workgroup to develop code changes to advance EV provisions for non-residential occupancies (BSC) and public schools and community colleges (DSA). Late Summer/early Fall of 2023.
    - **Outcome:** BSC conducted three CALGreen EV Workgroup (CEVW) workshops from October 2023-January 2024 which included the state agencies listed above, stakeholders and interested parties.
- Submit Initial code changes to the Building Standards Commission (BSC) for the 2024 Triennial Cycle. **February of 2024.** (BSC & DSA).
    - **Outcome:** BSC Submitted its CALGreen EV proposed code changes by the prescribed due date.

- Code Advisory Committee review in **Spring/Summer of 2024**. Public comment phase in **late Summer/early Fall of 2024** for the new ZEV standards in the Green Building Standards Code (CALGreen). (BSC & DSA).
    - **Outcome:** BSC conducted the GREEN Code Advisory Committee meetings March 18 and 19, 2024. BSC received mostly "approve as submitted" recommendations for the 2024 EV proposals. This task has been completed.
- Present state agency code changes to the California Building Standards Commission (CBSC) for the 2024 Triennial Cycle. Commission meeting in **December of 2024**. **Effective for use January 2026.** (BSC & DSA).
    - **Outcome:** BSC is currently preparing its CALGreen EV rulemaking package in preparation for the 45-day public comment period, which is scheduled from May 17 through July 1, 2024.

2024 Targeted Key Results:

- Continue with the current rulemaking process with the objective to obtain commission approval and adoption of the BSC EV proposals in December 2024.

Procurement Division

2. **Statewide Contracts for ZEVS and supporting equipment:** Establish contracts that are available for use by state and non-state government entities.

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. ZEV School Bus Contract (Completed)

2023 Targeted Key Results: Establish a Statewide Contract for ZEV School Buses for use by local school districts. California school districts will have access to a recently established grant program that was enacted to distribute $1.5 billion to school districts for fleet electrification over the next three fiscal years.

- **Outcomes**: Five Statewide Contracts awarded on October 18, 2023, for ZEV School Buses to support fleet electrification efforts in local school districts. The contract term is through 10/17/2025 with the option to extend for up to three additional years. All buses are eligible for the California Air Resources Board (CARB) Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP). Buses include passenger capacities from 24 to 78, including wheelchair-accessible buses.

b. Hydrogen Fuel Contract (New)

2024 Targeted Key Results: Establish a Statewide Contract for Hydrogen Fuel for state and local government entities. Market research is currently in progress. On 1/4/24, a customer survey was released to state departments to capture their need for Hydrogen Fuel. On 2/26/24, a Request for Information (RFI) was posted on the California State Contracts Register (CSCR) to obtain feedback from the supplier community to better understand their capabilities. Responses are currently under review. Anticipated award is late 2024/early 2025.

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. EV Charging Leadership Meetings (Continued)
   2023 Targeted Key Results: Continue to hold "EV Charging Leadership" stakeholder meetings in 2023 for state agencies and departments to learn about opportunities for EV charger installations at their facilities and other important topics such as the different types of "networking", charger incentive programs and more.

   Outcomes: Four meetings were held that addressed the following topics:

   - How to Get the Most Out of Your ARC™ System
   - Vehicle to Grid (V2G) & End of BTCPower EV Charger Contract 12/18/23 and Transition
   - Utility Programs at Southern California Edison to Assist with EV Charging Infrastructure
   - PG&E's "EV Fleet Program" – Incentives for MD/HD ZEVs and EV Charging Infrastructure

   2024 Targeted Key Results: Continue holding stakeholder meetings that help educate and inform state departments on EV charging technologies, changes in policies and external programs.

   b. Purchase EV Arcs (Continued)

   2023 Targeted Key Results 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.

- **Outcomes:** Office of Sustainability's Clean Transportation Unit purchased 21 EV Arcs (42 Level 2 charging ports) for eight state departments in 2023.

2024 Targeted Key Results: Continue to purchase EVArcs for state departments.

c. Installation of Level 2 EV Charging Ports (Continued)

2023 Targeted Key Results: Continue the planning, project development and installation of over 700 Level 2 EV charging ports at various state facilities for both fleet and some workplace charging. Also consider DC fast charging when appropriate particularly for medium- and heavy-duty ZEVs that will be added to the state fleet.

- **Outcomes:** Office of Sustainability's Clean Transportation Unit installed 441 Level 2 charging ports in 2023.

2024 Targeted Key Results: Continue the planning, project development and installation of over 500 Level 2 EV charging ports at various state facilities for both fleet and some workplace charging. Also install DC fast charging when appropriate particularly for medium- and heavy-duty ZEVs that will be added to the state fleet.

d. EV Charging Infrastructure Program Outreach (Continued)

2023 Targeted Key Results: Continue internal and external outreach to educate stakeholders about the DGS OS-Clean Transportation Unit's EV charging infrastructure program.

- **Outcomes:** Office of Sustainability's Clean Transportation Unit's Chief/Manager gave 4 presentations to various groups, both internal and external, in 2023.

2024 Targeted Key Results: Continue internal and external outreach by giving presentations to various stakeholders about the DGS OS-Clean Transportation Unit's EV charging infrastructure program.

e. Receive Additional Funding from Incentive Programs for EV Charging Projects (Continued)

2023 Targeted Key Results: Continue participating in utility and state charger incentive programs on behalf of our state client departments to receive additional funding to be re-invested in their new EV charging projects.

- **Outcomes:** Office of Sustainability's Clean Transportation Unit collected $432,953.03 in charger incentives in 2023. This funding will be reinvested back into future EV charging projects.

2024 Targeted Key Results: Continue participating in utility and state charger incentive programs on behalf of our state client departments to receive additional funding to be re-invested in their new EV charging projects.

f. Facilitate Additional Funding from Incentive Programs for Client EV Charging Projects (Continued)

2023 Targeted Key Results: Sign up state client departments in CARB's Low Carbon Fuel Standard (LCFS) program to receive additional funding to be reinvested in their new EV charging projects.

- **Outcomes:** Office of Sustainability's Clean Transportation Unit worked with 2 state departments in 2023 to register their chargers in the LCFS program.

2024 Targeted Key Results: Office of Sustainability's Clean Transportation Unit will work to expand to other departments in registering their chargers in the LCFS 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. Familiarity in Hydrogen Fueling Advancements (Continued)

2023 Targeted Key Results: Continue to stay abreast of technological changes and best practices in hydrogen fueling to be prepared for future state fleet hydrogen fueling infrastructure.

- **Outcomes:** Continued to keep up on the latest hydrogen technological changes by reviewing notes of the California Hydrogen Leadership Summit held in May of 2023.

2024 Targeted Key Results: Continue to keep up on the latest hydrogen technological changes and attend the California Hydrogen Leadership Summit.

b. Hydrogen Charging Needs (Continued)

2023 Targeted Key Results: 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.

- **Outcomes:** None in 2023.

2024 Targeted Key Results: Engage by setting up at least one meeting in 2024 to 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.

Office of Fleet and Asset Management

5. **State Fleet ZEV Utilization and Adoption:** Implement additional vehicle procurement and utilization policies for the state fleet to meet and/or exceed the timelines outlined in the Climate Groups ZEV Pledge for public fleets.

   Lead Program: Office of Fleet and Asset Management

   Key Collaborators: All state fleet-owning and fleet-operating agencies, Department of Finance.

   Key Results and Actions:

   a. **Resume Statewide ZEV Workgroup (Continued)**

      2023 Targeted Key Results: Reconvene ZEV Fleet Stakeholder Workgroup comprised of state fleet managers and DGS, OFAM, to review statewide policies and timelines on ZEV adoption within the state fleet to meet purchasing and fleet composition goals mandated in the state's ZEV Pledge by April 30, 2023.

      - **Outcomes**: Statewide Take-home ZEV Workgroup was reassembled in January 2023 to develop and issue the State Fleet ZEV Home Charging Policy Guidelines by December 31, 2025.

      2024 Targeted Key Results: Continue collaborating with the workgroup members to draft comprehensive ZEV Home Charging Policy Guidelines by December 2024. These guidelines will establish general parameters that state agencies can follow to develop and implement ZEV Home Charging policies that can support their respective operational needs.

   b. **Issue updated Statewide ZEV Policies (Continued)**

      2023 Targeted Key Results: Target, develop, and issue a statewide policy that phases out the purchase of internal combustion engine (ICE) passenger vehicles and sets new ZEV purchasing goals for light-duty (LD) and medium- and heavy-duty (MD/HD) vehicles (for all non-public safety applications) by December 31, 2023.

      - **Outcomes**: New ZEV policies were developed and proposed in February 2024; they are presently under consideration by the Administration.

      2024 Targeted Key Results: Continue to refine proposed policies in collaboration with the Government Operations Agency, the Department of Finance, and the State Equipment Council to finalize and issue the policies by January 1, 2025.

6. **Electrification Opportunities:** Identify state fleet electrification opportunities based on telematics data to strategically incorporate ZEVs into the state fleet.

Lead Program: Office of Fleet and Asset Management

Key Collaborators: State fleet-owning and fleet-operating agencies.

Key Results and Actions:

a. **ZEV Conversion Candidate Selection (New)**

2024 Targeted Key Results: Complete device installation and activation by June 30, 2024, and begin collecting statewide telematics data July 1, 2024. Analyze the first six months' data by January 31, 2025, and 12 months' data by July 31, 2025, to produce a statistically valid usage data analysis and electrification recommendations.

7. **Surplus ZEV Distribution:** Develop policies to encourage ZEVs retired from the state fleet to directly benefit communities most in need.

Lead Program: Office of Fleet and Asset Management

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

Key Results and Actions:

a. **ZEV Distribution in Priority Communities (Continued)**

2023 Targeted Results:

- Continue conversations 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 work through exclusions of surplus state fleet vehicles by December 31, 2023.
- Develop and implement a process and necessary agreements whereby state agencies may include their surplus ZEVs in incentive programs for disadvantaged communities by December 31, 2023.
- If warranted, form a workgroup of fleet managers to assess the outcomes of participation in the program and to develop statewide policy mandating the useof such programs.
    - **Outcomes:** Continued discussions with local air quality districts and the state's contracted auction vendor to facilitate the state's surplus ZEV distribution through CARB's Clean Cars 4 All program. However, due to the current state surplus vehicle auction vendor's refusal to participate as well as the insufficient number of the state's surplus ZEVs that meet the criteria of the Clean Cars 4 All program, the project was put on a temporary hold until the current auction contract expires in July 2024.

2024 Targeted Results: Engage with the new state surplus vehicle auction vendor and other dealerships to promote the Clean Cars 4 All program in collaboration with CARB and local air districts. Collect usage and age data of the state's ZEV fleet to identify candidates for the Clean Cars 4 All program by December 31, 2024, and

partner with the applicable state agencies to redistribute their surplus ZEVs through the Clean Cars 4 All program.

8. **Commercial ZEV Rental Utilization:** Implement Statewide policy and develop resources to increase the utilization of ZEV commercial vehicle rentals by state employees.

Lead Program: Office of Fleet and Asset Management

Key Collaborators: All state or local government agencies.

Key Results and Actions:

a. Encourage ZEV Rental Use (New)

2024 Targeted Key Results:

- In partnership with California Department of Human Resources (CalHR) update State Administrative Manual (SAM) to encourage ZEV rentals when available and practical to meet business operational needs.
- Identify additional locations most suitable for ZEV expansion. Work with commercial car rental vendor, to improve ZEV messaging and visibility in the state's authorized online self-booking tool.
- Continue to partner with the California Energy Commission (CEC), DGS Office of Sustainability (OS), and Office of Fleet and Asset Management (OFAM) to develop educational and training materials to educate travelers on ZEVs.