

DRAFT MINUTES MINUTES OF THE REGULAR MEETING OF THE SUSTAINABILITY COMMISSION July 18, 2024

Draft Minutes

The meeting was called to order at 4:00 p.m.

ROLL CALL:

Present: Alexander Fung, Susan Hansen (VC), Sonali Padgaonkar (C), Steve Poon,

Conny Yang Absent: None

Staff: Victoria Morin, Staff Liaison, Sustainability Specialist

Others Present: Susan Michael, Capitol Improvements Manager, Ursula Syrova,

Environmental Programs and Sustainability Manager

APPROVAL OF MINUTES

1. April 18, 2024 Sustainability Commission Minutes

MOTION: Vice Chair Hansen moved, seconded by Commissioner Fung to approve the minutes as presented.

MOTION PASSED: 4-0, Yang Absent

POSTPONEMENTS

No Postponements

ORAL COMMUNICATIONS

None

WRITTEN COMMUNICATIONS

None

STAFF AND COMMISSION REPORTS

OLD BUSINESS

NEW BUSINESS

2. New Construction Building Reach Code Alternatives

Commissioner Yang arrived at 4:11 p.m.

MOTION: Vice Chair Hansen moved, seconded by Commissioner Fung to recommend to the City Council that the Sustainability Commission take the following actions:

1) Recommended that the City of Cupertino replace its current electrification Reach Code to enhance electrification in alignment with Climate Action Plan goals.

MOTION PASSED: 5-0

3. Youth Engagement about the Climate Action Plan

NO ACTION TAKEN

4. Zero-emission Vehicles and Chargers, Municipal Plan to Electrify the Fleet NO ACTION TAKEN

FUTURE AGENDA SETTING

ADJOURNMENT

Meeting adjourned at 5:20 p.m.

| SUBMITTED 1 | BY: |
|-------------|-----|
|-------------|-----|

Victoria Morin, Staff Liaison

Note: Any attachments can be found on the Cupertino Website https://www.cupertino.org/our-city/agendas-minutes

Sustainability Commission

July 18, 2024, 4:00 pm

10185 N Stelling Rd, Quinlan Community Center, Conference Room



2. New Construction Building Reach Code Alternatives



Background

December 2019, Cupertino adopted its Reach Code

| Appliance | 2022 State Code | 2022 Cupertino Reach Code |
|---------------------------------|---------------------|-----------------------------------|
| Water Heating | Gas or Electric | Electric Required (All Buildings) |
| Space Heating | Encourages Electric | Electric Required (All Buildings) |
| Cooking | Gas or Electric | Electric with Exemptions |
| Outdoor kitchens and fireplaces | N/A | Electric Required |
| Clothing Drying | Gas or Electric | Electric with Exemptions |

Background

- California Restaurant Association v. City of Berkeley decision found gas bans were pre-empted by the federal Energy Policy and Conservation Act (EPCA).
- Cupertino suspended enforcement of the electrification requirements of the Reach Code on May 15, 2024.
- City still intends to pursue electrification researching options to consider moving forward.

Alternatives for Consideration

| Option | Pros | Cons |
|-----------------------------------|--|---|
| Repeal existing reach code Energy | Avoids legal riskUses established processes | Allows for continued use of natural gas, contributing to greenhouse gas emissions and poor air quality. Requires additional resources and adds |
| Performance Code | through Title 24 of the California Building Standards Code. | complexity during implementation. Doesn't address stoves, dryers, fireplaces, pool heating, etc. Only addresses space and water heating. Doesn't prohibit new gas infrastructure. |
| Air Quality | Covers any appliance that uses gas and emits NOx. Simple to enforce and conforms with BAAQMD regulations. | Novel approach. Doesn't prohibit new gas infrastructure. |

Discuss and Vote

- Staff recommend that the City of Cupertino replace its current electrification Reach Code for new construction with an alternative regulatory approach.
- From the letter to the CA Restaurant Association:

 "...City staff will promptly bring an ordinance to the
 City Council for consideration that advances the
 City's adopted policy of pursuing building electrification."

3. Sustainable Youth Engagement



Upcoming Cupertino Events

| Event name | Date |
|-----------------------------|-----------------------------|
| Sr Center Open House | August 23, 10:30 am to 1 pm |
| Fall Festival | September 14, 10 am to 5 pm |
| Bike Festival | September 28, 9 am to 1pm |
| Diwali Festival | October 12, 11 am to 6 pm |
| Public Safety Forum | October 17, time tbd |
| Teen Job/Volunteer fair | March |
| Big Bunny | March |
| Earth Day Fest | April |
| Cherry Blossom | April |
| Health Expo (senior center) | May |

Discussion Prompts

- Do you know of other events you would want to add to this list or prioritize?
- How many events do you want to commit to per year?
- Which events do you want to commit to?

4. ZEV and Chargers, Municipal Plan to Electrify



CA's Advanced Clean Fleet Regulation

- The Advanced Clean Fleets Regulation requires State and Local Governments:
 - Starting 2024, 50% of medium and heavy-duty truck, van, and bus purchases must be ZEV
 - Starting 2027, 100% of medium and heavy-duty truck, van, and bus purchases must be ZEV

Why do we need the ACF regulation?

The primary goal of the ACF regulation is to accelerate the market for zero-emission trucks, vans, and buses by requiring fleets that are well suited for electrification, to transition to ZEVs where feasible. The Board *directed* CARB staff to ensure that fleets, businesses, and public entities that own or direct the operation of medium- and heavy-duty vehicles in California purchase and operate ZEVs to achieve a smooth transition to ZEV fleets by 2045 everywhere feasible, specifically to reach:

- 100 percent zero-emission drayage trucks, last mile delivery, and government fleets by 2035
- 100 percent zero-emission refuse trucks and local buses by 2040
- 100 percent zero-emission capable utility fleets by 2040

Achieving these and other milestones would also contribute to meeting the goals in the Governor's Executive Order N-79-20.

Cupertino's Compliance

- 106 on-road vehicles in the City's fleet.
- 3 are currently ZEV
- Fleet electrification will require the installation of 18 new charging ports in 2025 and 36 total new ports in phase 2.

Timeline for Cupertino

| | 2024 | 2025 | 2026 | 2027 | 2028 |
|---------------------------------------|-------|----------------------------|-------------|--|-------------|
| Cumulative # of Vehicles Deployed: | , | 10 x Medium-Duty Pickup | Pickup, 1 x | 18 x Medium-Duty Pickup, 1 x Medium-Duty Van | Pickup, 2 x |
| MT of CO2e reduced* | 29.17 | 54.1 | 86.8 | 116.6 | 157.58 |



Total saved after 5 years 444.36 MT CO2e

*miles driven per year X *average gas mileage x emissions factor (0.0013)

Potential Charger Locations (Service Center)



- Existing charger
- Phase 1 chargers
- Phase 2 chargers

Charger types

TELLUS POWER GREEN PEDESTAL / WALLMOUNT AC CHARGER

7.2kW - 14.4kW Models—





Terra DC fast chargers Terra 124/184 UL

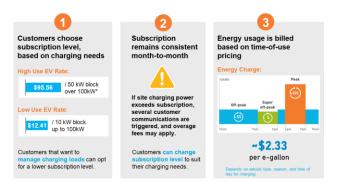


| | Charger type 1 | Charger Type 2 | Charger Type 3 | Charger Type 4 |
|--------------------------------|----------------|----------------|----------------|----------------|
| Charger Make: | Tellus Power | Autel | Autel | ABB |
| Charger Power Level: | 2 (7.2 kW) | 2 (19.2 kW) | 3 (60 kW) | 3 (180 kW) |
| Total Charger Quantity: | 2 | 20 | 1 | 1 |
| Total Charging Equipment Load: | 28.8 | 768 | 60 | 180 |

Charger Cost

| | Phase 1 | Phase 2 |
|--------------------------|-------------|-----------|
| LEVEL 2 – 7.2 kW | \$88,000 | \$0 |
| LEVEL 2 – 19.2 kW | \$440,000 | \$416,000 |
| DC FAST 60 kW | \$96,000 | \$0 |
| DC FAST 180 kW | \$0 | \$171,000 |
| MOBILIZATION | \$6,000 | \$6,000 |
| MAKE-READY | \$132,000 | \$0 |
| PG&E EV FLEETS INCENTIVE | - \$100,000 | \$0 |
| TOTAL | \$662,000 | \$594,000 |

Cost Savings





Inflation Reduction Act Credit

Summary

- Cupertino plans to be compliance with the ACF state regulation
- Next steps:
 - PG&E review/approval
 - Public Bid
 - Funding
 - Installation
 - PG&E connecting to grid