

# Climate Action Plan Report Metrics

## Sustainability Commission

Gilee Corral, Acting Sustainability Manager  
June 20, 2019

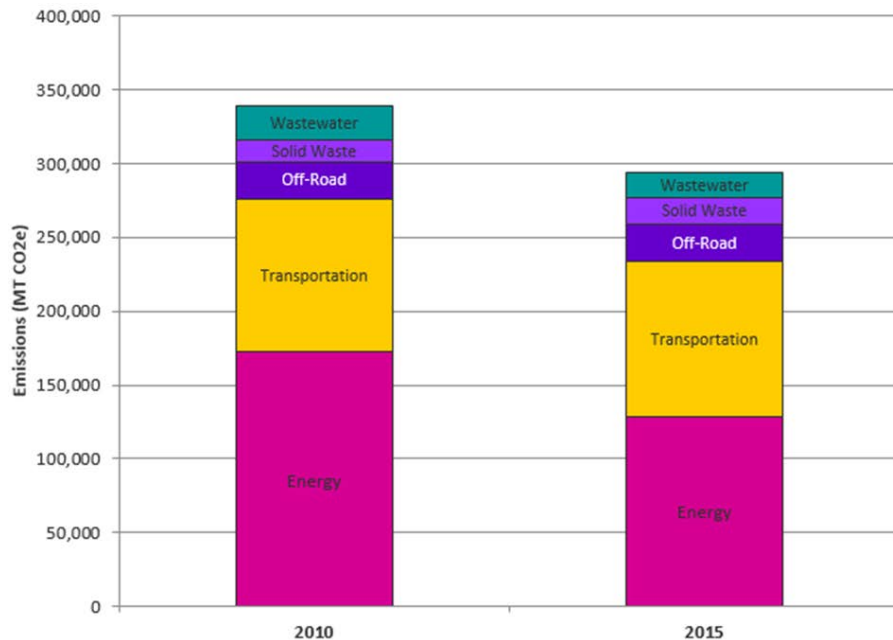


CUPERTINO

# What we measure

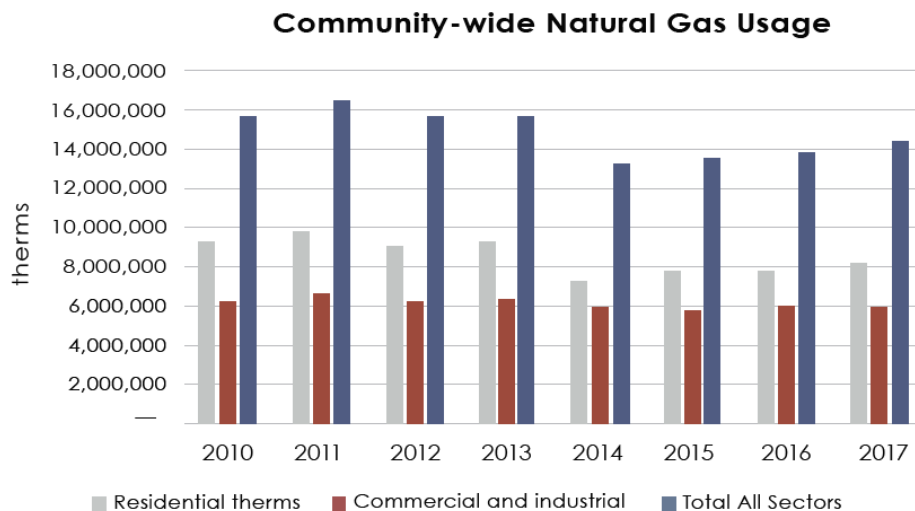
- Metrics:
  - Greenhouse gas (GHG) emissions
  - Energy
  - Water
  - Waste
  - Green infrastructure
- Parameters:
  - Baseline year 2010
  - Target year 2020
  - Community and municipal

# Greenhouse gas emissions



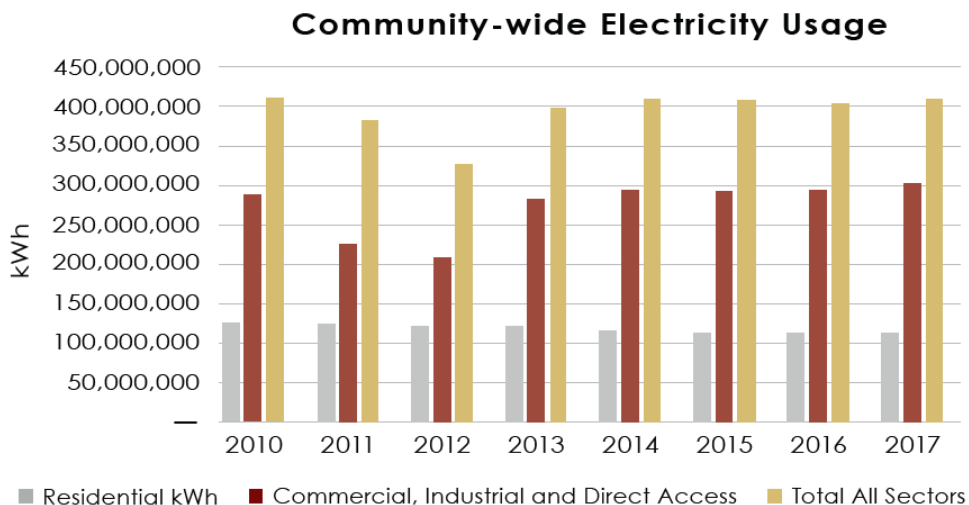
- Goal: 15% ↓ by 2020
- 2015 data: 13% ↓
- Global Covenant of Mayors Compliant

# Energy



- No natural gas target
- PG&E Green Communities
- 2017 data: 9% ↓

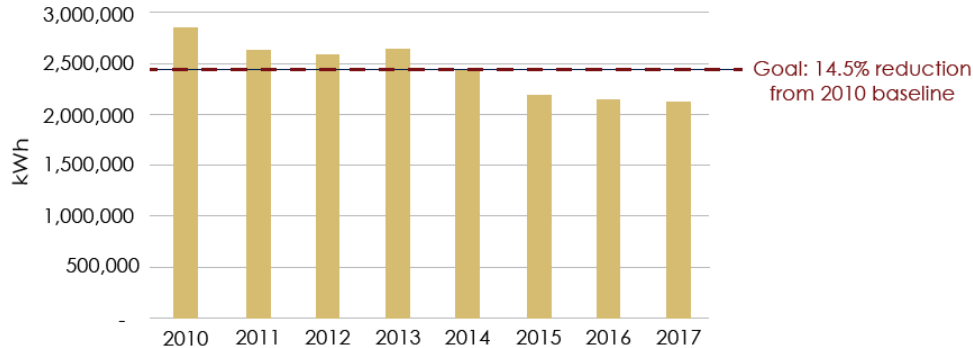
# Energy



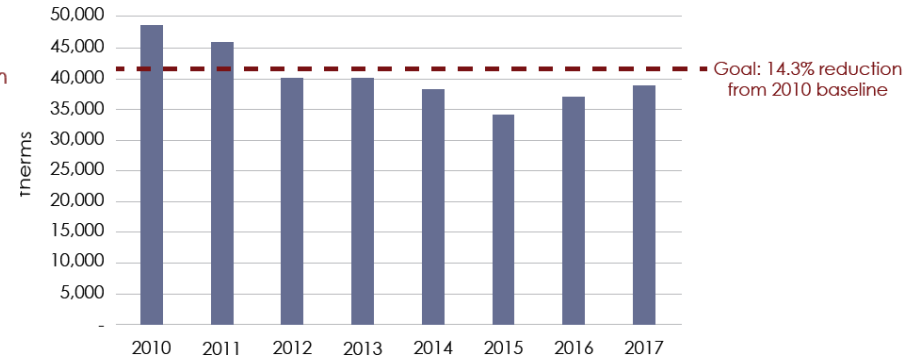
- Target: kWh / year savings; program participation
- PG&E Green Communities + SVCE
- Significant data gaps

# Energy

**Municipal Electricity Usage:  
Buildings, irrigation, & other uses**

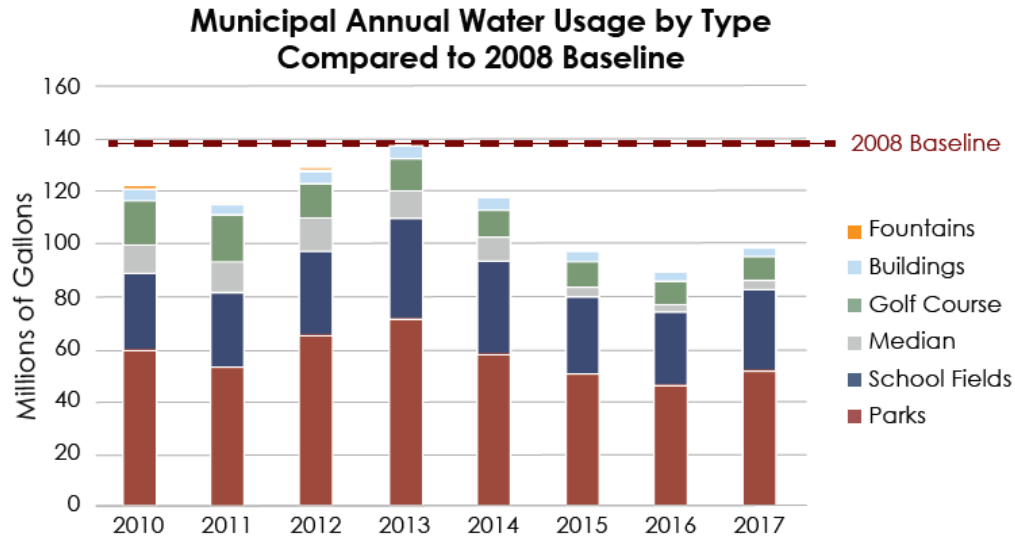


**Municipal Natural Gas Usage Compared to Goal**



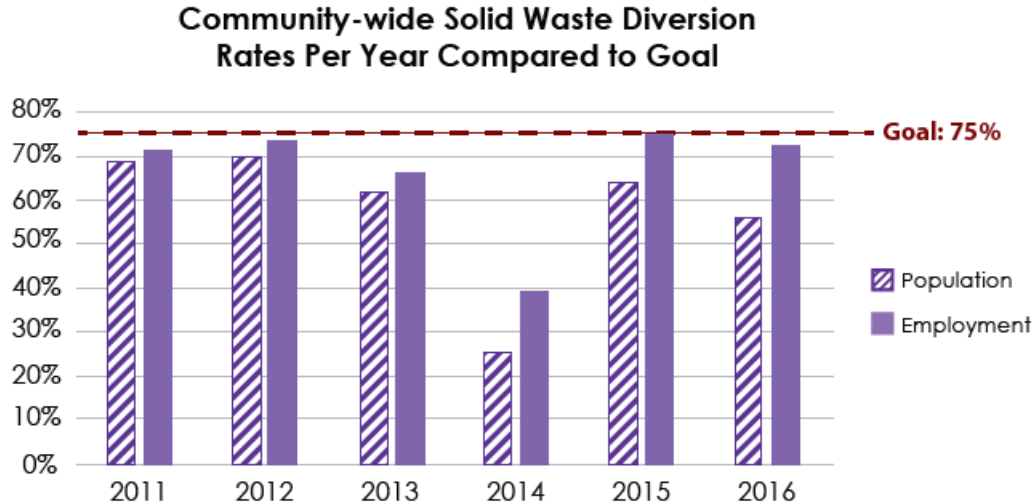
- Target: kWh / therms % reduction
- PG&E + ABAG Power

# Water



- Municipal Target: 20% ↓ (2008 baseline)
- Community Target: 20% ↓ per capita (2010 baseline)
- CA Water Service + San Jose Water

# Waste

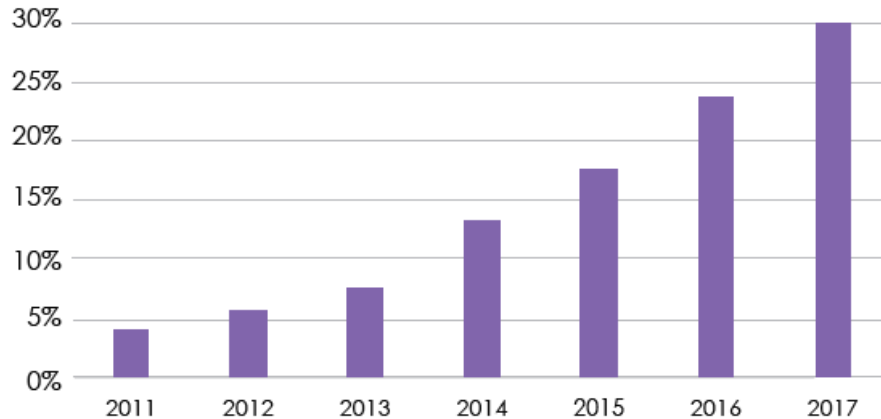


- Target: divert 75% of waste
- City reports tonnage, CalRecycle creates calculations



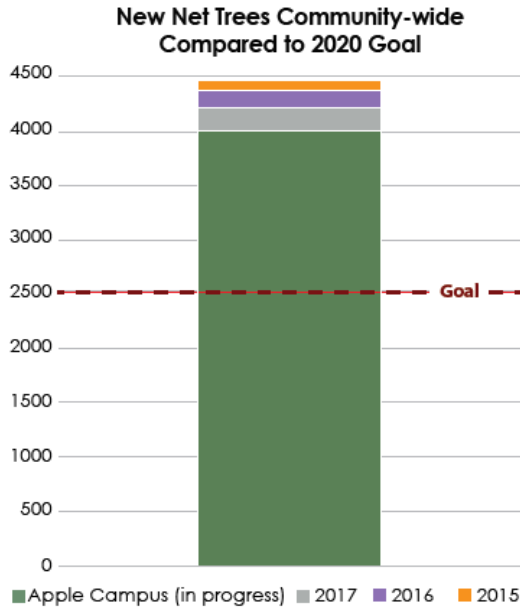
# Waste

**Percentage of Commercial and Multifamily Accounts with Organics Collection Service**



- Target: based on household & businesses % diversion of compostable waste

# Green infrastructure



- New net trees target met!

## Other metrics...



**2.7 MW**  
of community  
solar capacity

installed since 2015, exceeding 2020  
goal of 1.5 MW (Measure C-E-5)

## City Vehicle Fleet



All Electric  
**2%**



Plug-in/Hybrid  
**12%**



Diesel  
**23%**



Gas  
**64%**

**Clean Vehicles 14%**

## Employee Commute Breakdown by Travel Mode (2017)



**87%**  
Drove Alone



**9%**  
Carpooled  
(2 to 6 people)



**1%**  
Biked



**1%**  
Walked



**1%**  
Worked from  
Home

...etc.

\*Vanpool, public transit, shuttle, motorcycle: **0%**

# Sustainability Division

[sustainability@cupertino.org](mailto:sustainability@cupertino.org)



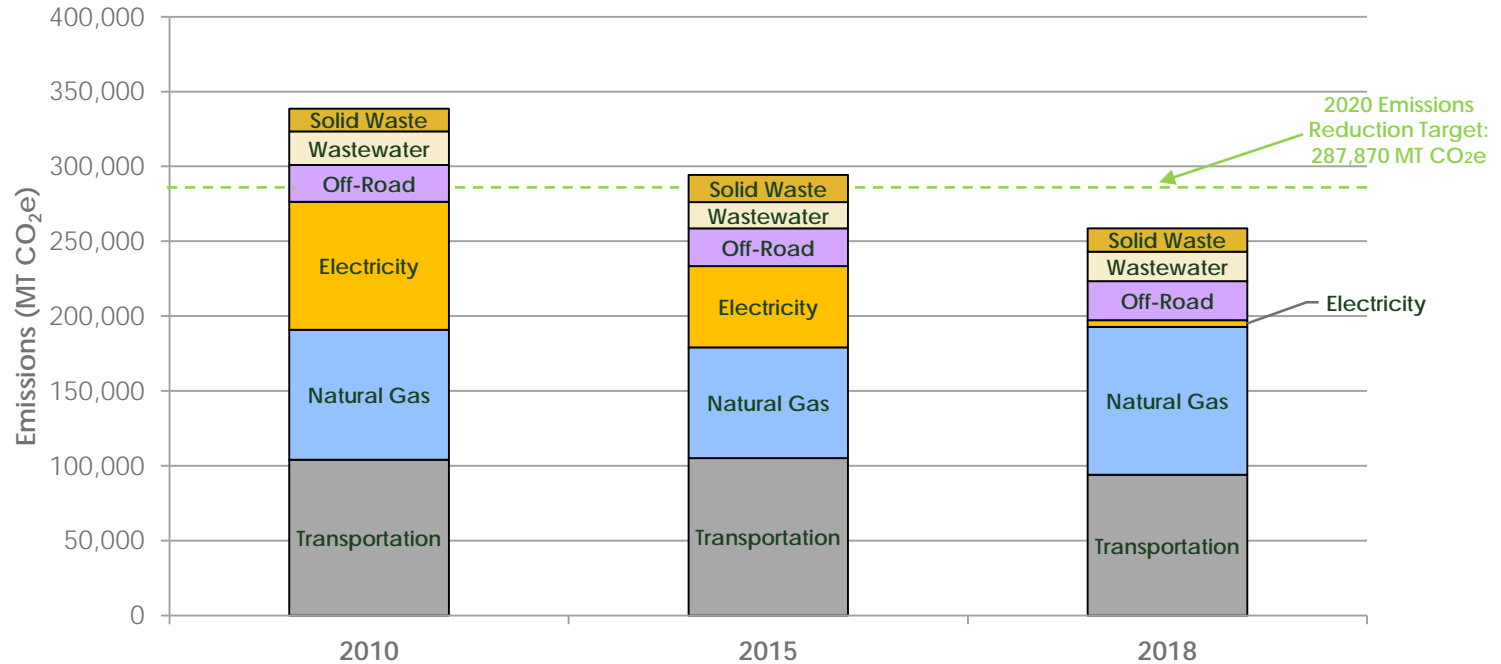
**CUPERTINO**

# 2018 Draft Greenhouse Gas Inventory Results

Community-wide and  
Municipal Operations  
Greenhouse Gas  
Inventories

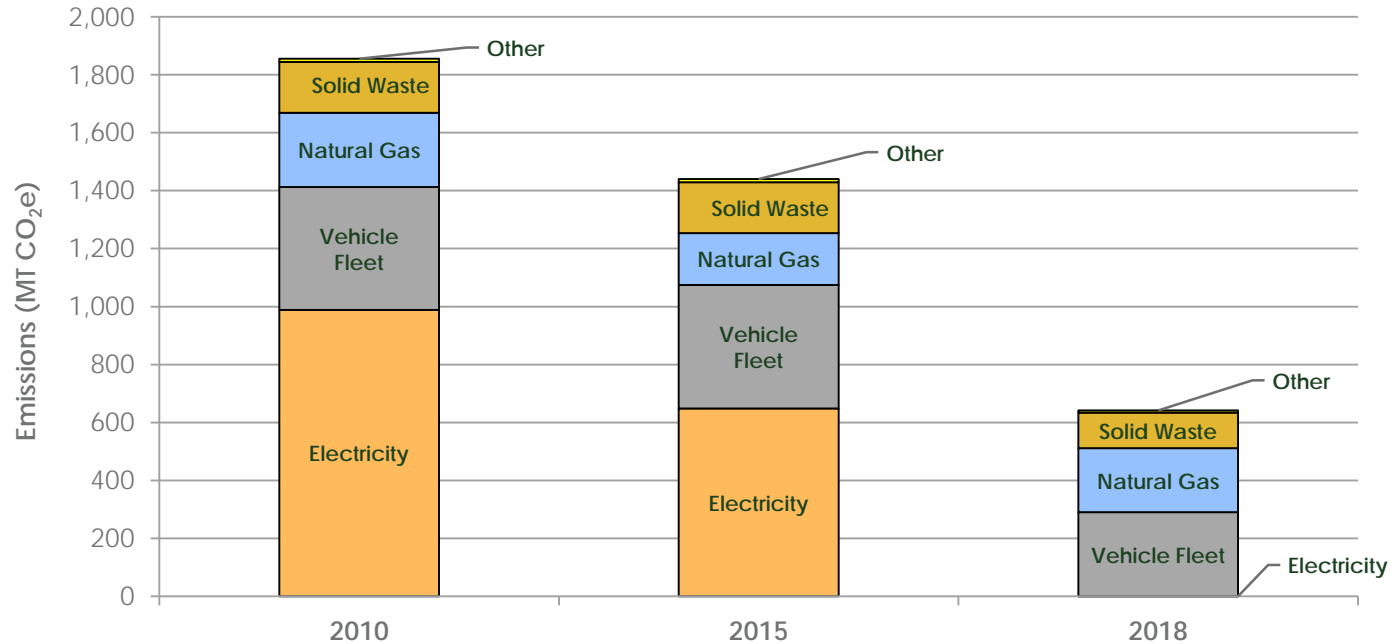


# Draft Community Greenhouse Gas Emissions



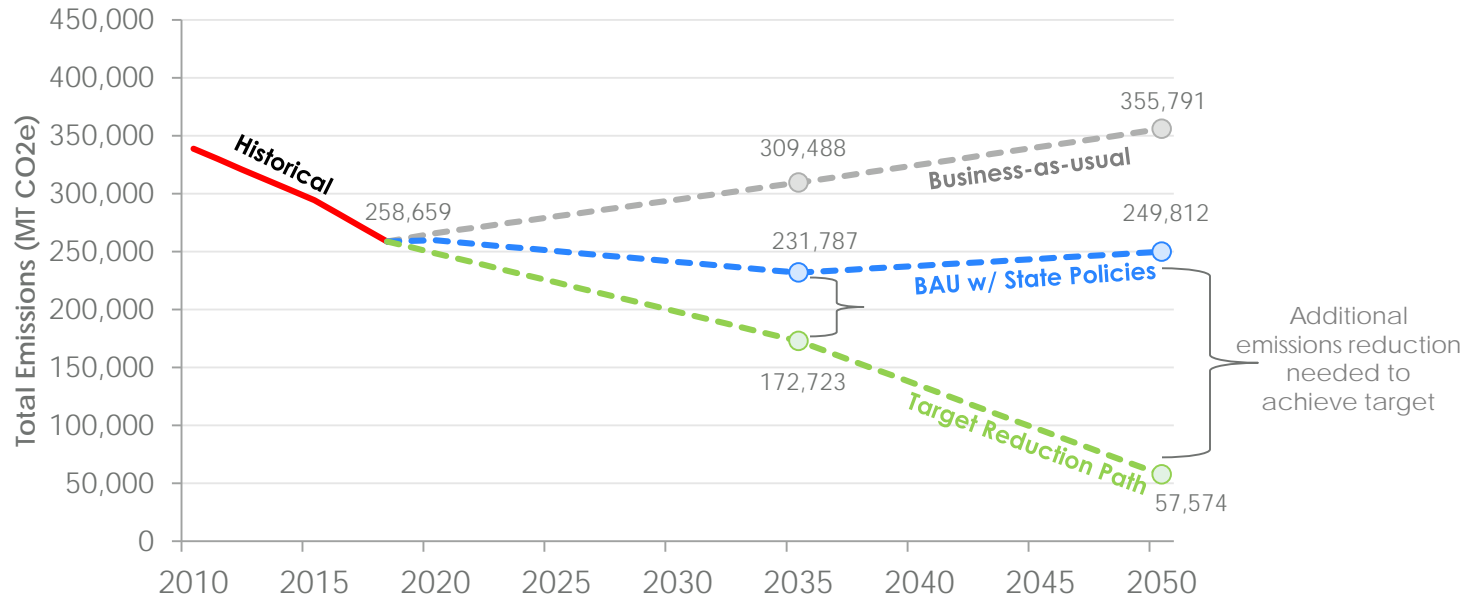
- Total emissions decreased 24% since 2010
- Electricity emissions decreased 95% since 2010
- Natural gas and transportation growing as percentage of total emissions

# Draft Municipal Greenhouse Gas Emissions



- Total emissions decreased 65% since 2010
- Electricity emissions decreased 99.98% since 2010
- Natural gas and vehicle fleet growing as percentage of total emissions

# Draft Community Emissions Forecast



- As of 2018, emissions are 24% below 2010 levels and the 2020 target (15%) has been achieved
- Emissions with State policies are projected to be 32% / 26% below 2010 by 2035/2050
- Additional emissions reductions will be needed to achieve Cupertino's 2035 and 2050 targets (49% / 83% below 2010)



CITY OF CUPERTINO SUSTAINABILITY COMMISSION

Environmental Education Center 22221 McClellan Road

Thursday June 20, 2019 4:00 p.m.

**MINUTES**

**PLEDGE OF ALLEGIANCE**

At 4:05 p.m. Chair Weber called the meeting to order and led the Pledge of Allegiance.

**ROLL CALL**

Commissioners Present: Anna Weber, Gary Latshaw, Angela Chen, Meera Ramanathan (arrived @ 4:11 p.m.).

Absent: Vignesh Swaminathan

Staff: Gilee Corral, Acting Sustainability Manager; Holly Kimura-Carlin, Climate Corps Fellow

Guests: Bruce Karney; Kunal; Gwyn Azar; Cupertino High School (CHS) Environmental Club members: Sanat Singhal, Emily Fan, Lawrence Fan, Alice, Mukta, Calvin Anderson, Shiv Shah

**1. APPROVAL OF MINUTES**

Draft minutes of May 16, 2019 meeting were reviewed. Commissioner Chen moved and Commissioner Latshaw seconded to approve the minutes. The motion carried unanimously with Commissioner Swaminathan absent.

**POSTPONEMENTS** - None.

**ORAL COMMUNICATIONS**

Bruce Karney passed out a handout about a planned event for Commissioners in the area.

Kunal spoke on behalf of a student, Nicole, to support the City adopting a fossil fuel divestment resolution and a resolution to amend the City's climate emergency declaration.

Shiv Shah on behalf of CHS Environmental Club spoke to support the City adopting a Climate Crisis Package and a fossil fuel divestment resolution.

Calvin Anderson on behalf of CHS Environmental Club spoke to support the City adopting a Climate Crisis Package and a fossil fuel divestment resolution.

Emily Fan on behalf of CHS Environmental Club spoke to support the City adopting a Climate Crisis Package, a resolution to amend the City's climate emergency declaration, and a fossil fuel divestment resolution.

Sanat Singhal on behalf of CHS Environmental Club spoke to support the City adopting a fossil fuel divestment resolution and a resolution to amend the City's climate emergency declaration.

**WRITTEN COMMUNICATIONS**

**2. SC 6-20-19 Written Communications**

Chair Weber noted the written communications attached to the agenda. Chair Weber reordered the agenda items as follows: Item #3 moved to the end of the meeting.

## **NEW BUSINESS**

- 4. Subject: Discuss Green New Deal legislative efforts on the federal and state level and consider making a recommendation to the City Council to sign a resolution in support of H.R. 109 (Representative Ocasio-Cortez) and S. Res. 59 (Senator Markey) and AB 1276 (Assemblymember Bonta)**

Chair Weber opened Public Comment and the following individuals spoke:

Kanal spoke to support the CHS Environmental Club's version of a Green New Deal (GND) resolution.

Sanat Singhal spoke to support the CHS Environmental Club's version of a GND resolution.

Emily Fan spoke to support the CHS Environmental Club's version of a GND resolution and of her desire for the government to invest in sustainable technologies.

Gwyn Azar spoke in support of the GND resolution, noting a petition that was started in support and other cities that have launched their own version of a GND or supported GND efforts.

Calvin Anderson spoke in support of a GND resolution that satisfies the criteria in the CHS Environmental Club's version of the resolution.

Chair Weber closed Public Comment and the Commission discussed the GND resolution issue:

- Commissioner Latshaw asked for clarification from the students on what they were proposing and Emily Fan clarified their request.
- The Commissioners discussed the possibilities, including supporting the federal and state GND efforts while encouraging more aggressive GND efforts.
- Commissioners expressed concerns: having enough time to review the resolutions before recommending support to City Council, risks of taking an aggressive stance and not following through, ensuring this legislative advocacy is in sync with the City Council's legislative priorities.

Discussion to be continued to the July meeting. Each Commissioner will research the related state and federal bills in preparation for the discussion.

- 5. Subject: Staff overview of Climate Action Plan metrics**

Chair Weber opened Public Comment and the following individual spoke:

Bruce Karney spoke in favor of conducting annual greenhouse gas emissions inventories and switching the City's emissions reduction target from an absolute target to a per capita basis, including the resident population plus daytime worker population in the per capita metric. He noted that \$7.5 million was added to the budget for sustainability activities in Mountain View.

Chair Weber closed Public Comment and Commissioners asked Karney clarifying questions.

Staff presented an overview of the Sustainability Division's Climate Action Plan metrics and answered Commissioners's questions related to the presentation.

## **6. Subject: Sustainability Speaker Series planning**

Chair Weber opened Public Comment and the following individual spoke:

Sanat Singhal talked about gearing a speaker event to the youth and advertising more effectively.

Chair Weber closed Public Comment and the Commissioners asked Singhal clarifying questions.

Commissioners discussed Singhal's suggestions and how to better target a speaker event to a younger audience. Commissioner Latshaw suggested inviting climate activist Greta Thunberg to speak and the Commissioners discussed this option. The Commissioners agreed to invite Bea Johnson to speak for the first event in early fall. Discussion to be continued to the July meeting.

## **7. Subject: Discuss and select agenda topics for upcoming Sustainability Commission meetings**

The Commissioners discussed the possibility of moving the August meeting date; staff will contact Commissioner Swaminathan to confirm his attendance for the August meeting. Discussion to be continued to the July meeting.

## **OLD BUSINESS**

### **3. Subject: Update on Buy Clean and Consider Resolution Language**

Chair Weber moved and Commissioner Ramanathan seconded to move the Buy Clean update to the July 18<sup>th</sup> Commission meeting. The motion carried unanimously with Commissioner Swaminathan absent.

Commissioner Chen left at 6:01 p.m.

## **STAFF AND COMMISSION REPORTS**

**Commission updates:** None.

**Staff updates:**

- Gilee Corral will be out of town for the August Commission meeting.
- Fall Festival – September 14<sup>th</sup>
- Silicon Valley Clean Energy is launching a heat pump water heater rebate program soon.
- Electric vehicle solar project was not included in the adopted budget and will be discussed separately at a future Council meeting.

**ADJOURNMENT-** 6:05 p.m.

CITY OF CUPERTINO SUSTAINABILITY COMMISSION

Environmental Education Center, 22221 McClellan Road

Thursday, August 29, 2019 4:00 p.m.

**MINUTES**

**PLEDGE OF ALLEGIANCE**

At 4:05 p.m. Chair Weber called the meeting to order and led the Pledge of Allegiance.

**ROLL CALL**

Commissioners Present: Anna Weber, Gary Latshaw, Vignesh Swaminathan, Angela Chen, Meera Ramanathan (arrived @ 4:09 p.m.). Absent: None.

Staff: Andre Duurvoort, Sustainability Manager; Sean Hatch, Permit Center Manager; Gian Martire, Senior Planner; Gilee Corral, Sustainability Program Coordinator.

Guests: Ben Butterworth, DNV GL (via conference call); John Supp, Silicon Valley Clean Energy; Walker Wells, Raimi & Associates; Blake Herrschaft, DNV GL; members of the public.

**1. APPROVAL OF MINUTES**

Draft minutes of August 15, 2019 meeting were reviewed. Commissioner Chen moved and Commissioner Swaminathan seconded to approve the minutes. Ayes: Weber, Swaminathan, Chen. Noes: None. Abstain: Latshaw. Absent: Ramanathan.

**POSTPONEMENTS**

None.

**ORAL COMMUNICATIONS**

Sophia Wang talked about concern over plastic waste and her desire for Cupertino to ban distribution of certain types of plastics in restaurants.

Jennifer Zhao talked about policy to ban fossil fuels investment.

**WRITTEN COMMUNICATIONS**

Gilee Corral distributed Late Written Communications to the Commission. Chair Weber noted that the Late Written Communications could be discussed during the reach codes discussion.

**OLD BUSINESS** - None.

**NEW BUSINESS**

- 2. Presentation on draft 2018 greenhouse gas emissions inventory with consultant DNV GL and staff update on Climate Action Plan report**

The DNV GL consultant, Ben Butterworth, gave a presentation on the City's draft greenhouse gas emissions (GHG) inventory via conference call. 2018 emissions have reduced approximately 23% for community and the City has met its 2020 emissions reduction target ahead of schedule.

Corral provided an update on the Climate Action Plan (CAP) report; the report will be included in an Items of Interest newsletter to City Council but will not be formally presented to Council. Staff will schedule a presentation on the report for the Commission once it is complete.

Chair Weber opened and closed public comment (no comments).

Butterworth answered questions from the Commissioners. Issues raised: Ramanathan requested per capita metric; this will be included in the final report. Latshaw asked about measuring leakage effects from natural gas pipelines; he would like to know how to address the increase in nonresidential gas usage.

**3. Subject: Receive presentation by Silicon Valley Clean Energy on model building reach codes and provide any input to staff**

John Supp with Silicon Valley Clean Energy (SVCE) gave a presentation on SVCE's proposed electrification reach codes and the process for local adoption.

Chair Weber opened public comment and the following individuals spoke:

James Tuleya talked about the County of Santa Clara looking into reach codes and declaring a climate emergency.

John Supp answered questions from members of the public:

A member of the public asked why mandatory solar is not part of the proposed reach code.

A member of the public asked for clarification on the difference between "mostly electric" and dual energy home.

A member of the public asked if the cost was lower to maintain a home with an electric heat pump and furnace.

Chair Weber closed public comment.

The Commission discussed the presentation and Supp and consultant Blake Herrschaft answered their questions. Issues raised: if rebates are included in increase cost estimates for dual fuel homes; the GHG impact of new construction units; impact of new electric load on SVCE's capacity; levels of electric vehicle (EV) charging infrastructure; what other cities are considering; how to mitigate issues with heat pump water heaters, etc.

**4. Subject: Discuss CALGreen Tier 1 and Tier 2 options with Building and Sustainability staff and consultant Raimi & Associates and provide any input to staff**

Walker Wells, Raimi & Assoc. consultant, gave a presentation on CALGreen Tiers 1 and 2 and how the options fit into the SVCE model code approach.

Chair Weber opened public comment and the following individuals spoke:

Kitty Moore (Cupertino resident) asked questions about projects being modeled, i.e. Vallco, and the timing of the codes going into effect; she talked about concerns about sufficient electrical capacity on City streets to accommodate charging Tesla EVs. Wells answered her questions.

James Tuleya talked about the City of Mountain View's reach code adoption process, relationship of the code to cities's CAP goals, and new construction code paving the way for market development.

Joan Chin (Cupertino resident) asked if CALGreen addressed health and issues related to proximity to the freeway. Walker answered her question.

Bruce Karney supports Cupertino adopting all electric codes and talked about hydrogen fuel cell powered vehicle adoption considerations in planning for EV reach code.

Chair Weber closed public comment and the Commission discussed the presentation and asked questions:

- Vice-Chair Latshaw asked about the Commission's role in the code adoption process. Corral answered that staff requests process recommendations and general impressions currently, and later, the Commission will make a recommendation to Council on the codes at a future meeting.
- Chair Weber asked about the process of adopting CALGreen Tier 1 or 2 and Andre Duurvoort answered it would be part of the whole code adoption process if the timing works out; Tier 1 or 2 could also be adopted at any time after the other codes go into effect.
- Commissioner Chen asked if training would be needed if the Tiers were adopted; Wells answered that the subject matter is familiar to plan checkers, but some training may be needed.
- Staff and consultants answered questions on how remodels would be treated.
- Gian Martire gave examples of large mixed-use projects in the pipeline or approved: DeAnza Hotel, Westport development, some mid-sized 10-15 unit projects.
- Commissioner Swaminathan asked if other items could be considered for adoption, i.e. impervious pavement. Wells answered that this is generally covered under Low Impact Development requirements. This started a brief discussion on storm water management.

Other issues raised included: level of stringency in CALGreen Tiers and maintenance of the reach codes after the code cycle ends, coordination with neighboring cities's model codes, etc.

**5. Subject: Discuss model reach building codes and CALGreen Tier 1 and 2 options, reach code adoption process planning, and provide recommendations to staff on next steps**

Chair Weber opened public comment and the following individuals spoke:

Dashiell Leeds on behalf of Sierra Club Loma Prieta talked about concerns about safety risks related to natural gas infrastructure, City of Menlo Park electrification reach code, and support of the Commission adopting an all electric building code.

Commissioner Chen left the room at 6:25 pm.

James Tuleya representing Carbon Free Silicon Valley supports all electric code but if moving forward is difficult, supports SVCE mixed fuel model code for a year and later pursuing all electric code.

A student representing the Cupertino Action Team supports all electric code and spoke about their desire for the Sustainability Commission to recommend to City Council to add a natural gas ban to the City Council's Work Program.

Kitty Moore (Cupertino resident) asked if the presentation slides would be publicly available. Staff explained files are posted to the Commission meeting website after meetings.

Chair Weber closed public comment. Commissioner Chen returned to the room at 6:32 pm.

Commissioners Weber and Swaminathan gave an update from the Reach Codes Subcommittee's discussions. The Subcommittee prefers new construction to be all electric and for the Commission to consider Tiers 1 and 2. The Commission discussed how this might affect remodels and staff and consultants answered technical questions.

Commissioner Chen expressed her preference for all electric code but would like to understand how it would affect residents before giving specific recommendations. She left at 6:40 p.m.

The Commission discussed stakeholder involvement. Commissioner Swaminathan asked if the Planning Commission was involved and staff responded that the proposed reach codes affect the building code and therefore are outside the Planning Commission's purview; if staff proposed changes that touched the planning side, involving the Planning Commission may become necessary.

Other items discussed included water conservation, natural gas cooking, looking forward to the 2022 code cycle, etc.

Vice-Chair Latshaw noted that eliminating natural gas would reduce 25% of atmospheric warming from GHG emissions and supports fast and aggressive reach code adoption. The Commissioners expressed a desire to push toward more aggressive all electric measures, but to consider the implications for renovation.

Next steps:

- Wells will look into implications and risks for the CALGreen Tier 1 and 2 options.
- The Reach Codes Subcommittee will meet with staff to begin plans for the public meeting.
- Commissioners to email Corral with suggestions of stakeholders for outreach.

## **STAFF AND COMMISSION REPORTS**

**Commission updates:** - None.

**Staff updates:**

- Zero Waste Home – Bea Johnson Speaker Series event scheduled for Sep. 23 at 6:30 pm.
- City of Cupertino is officially supporting AB 1080 (Gonzalez) and SB 54 (Allen) – California Circular Economy and Plastic Pollution Reduction Act

**ADJOURNMENT-** 7:05 p.m.