

## **City of Sunnyvale**

## Notice and Agenda - Final Sustainability Commission

Monday, June 18, 2018	7:00 PM	West Conference Room, City Hall, 456 W.
		Olive Ave., Sunnyvale, CA 94086

#### CALL TO ORDER

#### SALUTE TO THE FLAG

ROLL CALL

#### **PRESENTATION**

18-0564 Recognition of Service

#### ORAL COMMUNICATIONS

This category provides an opportunity for members of the public to address the commission on items not listed on the agenda and is limited to 15 minutes (may be extended or continued after the public hearings/general business section of the agenda at the discretion of the Chair) with a maximum of up to three minutes per speaker. Please note the Brown Act (Open Meeting Law) does not allow commissioners to take action on an item not listed on the agenda. If you wish to address the commission, please complete a speaker card and give it to the Recording Secretary. Individuals are limited to one appearance during this section.

#### CONSENT CALENDAR

<u>18-0563</u> Approve the Sustainability Commission Meeting Minutes of May 21, 2018

**Recommendation:** Approve the Sustainability Commission Minutes of May 21, 2018 as submitted.

#### PUBLIC HEARINGS/GENERAL BUSINESS

18-0430Accept the Climate Action Plan Biennial Progress Report 2018<br/>and Find that the Action is Exempt from Environmental Review<br/>under CEQA Guidelines Section 15378(b)(5)

**Recommendation:** Recommend that the City Council find that the action is exempt from environmental review under California Environmental Quality Act Guidelines Section 15378(b)(5) and accept the Climate Action Plan Biennial Progress Report 2018.

#### STANDING ITEM: CLIMATE ACTION PLAN (CAP 2.0) UPDATE

<u>18-0565</u> Review and Discuss Potential EV Charging Infrastructure Planned for new City Hall

#### STANDING ITEM: CONSIDERATION OF POTENTIAL STUDY ISSUES

<u>18-0566</u> Proposed Study Issue: Implement a Dockless Bicycle Share Program in Sunnyvale

#### NON-AGENDA ITEMS & COMMENTS

#### -Commissioner Comments

#### -Staff Comments

#### ADJOURNMENT

Notice to the Public:

Any agenda related writings or documents distributed to members of this meeting body regarding any item on this agenda will be made available for public inspection at City Hall, 456 W. Olive Avenue, Sunnyvale or can be accessed through the Office of the City Clerk located at 603 All America Way, Sunnyvale during normal business hours and in the meeting location on the evening of the Sustainability Commission meeting, pursuant to Government Code §54957.5.

Agenda information is available by contacting Nupur Hiremath at (408) 730-7743. Agendas and associated reports are also available on the City's website at sunnyvale.ca.gov or at the Sunnyvale Public Library, 665 W. Olive Ave., Sunnyvale, 72 hours before the meeting.

Pursuant to the Americans with Disabilities Act, if you need special assistance in this meeting, please contact Nupur Hiremath at (408) 730-7743. Notification of 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35.160 (b) (1))



## City of Sunnyvale

Agenda Item

Agenda Date: 6/18/2018

**Recognition of Service** 



#### 18-0563

Agenda Date: 6/18/2018

#### <u>SUBJECT</u>

Approve the Sustainability Commission Meeting Minutes of May 21, 2018

#### **RECOMMENDATION**

Approve the Sustainability Commission Minutes of May 21, 2018 as submitted.



## **City of Sunnyvale**

## Meeting Minutes - Draft Sustainability Commission

Monday, May 21, 2018	7:00 PM	West Conference Room, City Hall, 456 W.
		Olive Ave., Sunnyvale, CA 94086

#### CALL TO ORDER

Chair Paton called the meeting to order at 7:00 p.m. in the West Conference Room.

#### SALUTE TO THE FLAG

Chair Paton led the salute to the flag.

#### ROLL CALL

Present: 6 - Chair Bruce Paton Commissioner Dan Hafeman Commissioner Stephen Joesten Commissioner Kristel Wickham Commissioner Steven Zornetzer Commissioner Douglas Kunz

Council Liaison – Glenn Hendricks (absent)

Commissioner Doug Kunz arrived at 7:09 p.m.

#### ORAL COMMUNICATIONS

None.

#### **CONSENT CALENDAR**

1 <u>18-0507</u> Approve the Sustainability Commission Meeting Minutes of April 16, 2018

Commissioner Joesten pulled the draft April 16, 2018 meeting minutes from the consent calendar and requested that they be amended to reflect that Silicon Valley Leadership Group (SVLG) would be holding a Sustainability Summit, rather than a meeting, on May 24, 2018.

Commissioner Wickham moved, and Commissioner Zornetzer seconded, a motion

to approve the consent calendar as amended. The motion carried by the following vote:

- Yes: 6 Chair Paton Commissioner Hafeman Commissioner Joesten Commissioner Wickham Commissioner Zornetzer Commissioner Kunz
- **No:** 0

#### PUBLIC HEARINGS/GENERAL BUSINESS

2 <u>18-0508</u> Annual Review of the City Manager's Recommended Budget Full budget available online at: <https://sunnyvale.ca.gov/civica/filebank/blobdload.asp? BlobID=25605>

The Commission discussed the City Manager's Recommended Budget for FY 2018/2019 (hereafter Recommended Budget) and asked clarification questions of staff.

Vice Chair Hafeman asked for clarification on why many of the major programs within the Environmental Services Department (ESD) were unfunded, including Climate Action Plan implementation. Melody Tovar, Interim Director of Environmental Services, explained that most departments had a list of projects that were similarly unfunded, and the City's Budget process funds programs in 2-year increments as a part of its Projects Budget cycle. She also clarified that the Recommended Budget for the first time discretely identifies Environmental Sustainability Programs as a separate program (Program 368) within the ESD budget, to help track and monitor sustainability program dollars more closely. Ms. Tovar noted that the City's sustainability initiatives are supported by additional sources of funding as well, such as grants; and that some other sustainability initiatives, such as Green Building Program updates, are funded as a part of ongoing programs within departmental budgets.

The Commission discussed several issues including: the need for greater visibility of sustainability staff in the organization to ensure effective coordination of CAP implementation across the City's operations; the value of and need for long-term planning for funding future climate action efforts as a part of the City's operating budget; and greater transparency, accountability, and benchmarking of City's

sustainability spending, which could inform future budget development.

Nupur Hiremath, Sustainability Coordinator, explained that the minutes of this meeting would be transmitted to City Council for their consideration at the Budget Adoption meeting in June.

Commissioner Zornetzer moved, and Commissioner Joesten seconded, a motion to provide the following recommendations on the Recommended Budget to City Council:

(1) Identify a sustainability baseline budget, including (a) clearly identifying funds allocated to sustainability initiatives across department budgets, (b) identifying the greenhouse gas (GHG) reduction budget as a subset of the sustainability budget, and (c) benchmarking Sunnyvale's sustainability budget to other cities' sustainability budgets;

(2) Incorporate CAP 2.0 implementation in the City's 20-year budgeting cycle;

(3) Consider and plan for funding requirements in all city departments that will be necessary to implement the more ambitious strategies from CAP 2.0 and for meeting the state's GHG reduction target; and

(4) Create higher visibility and accountability within the Budget process for expansion and long-term implementation of CAP and sustainability initiatives, by (a) considering and budgeting for the long-term addition of a Chief Sustainability Officer or Sustainability Office within the Office of the City Manager, and (b) including environmental sustainability performance indicators in the City Manager's performance plan.

The motion carried by the following vote:

Yes: 6 - Chair Paton Commissioner Hafeman Commissioner Joesten Commissioner Wickham Commissioner Zornetzer Commissioner Kunz

**No:** 0

#### STANDING ITEM: CLIMATE ACTION PLAN (CAP 2.0) UPDATE

Commissioner Wickham announced that the next meeting of the CAP 2.0 Advisory Committee (CAC) would be held on Thursday, May 24, 2018 at 6:30 p.m. at the Community Center. Nupur Hiremath invited Sustainability Commissioners to attend the meeting if interested, as the CAP 2.0 consultant team would be presenting draft scenarios for 2030 and 2050, which is the crux of the technical analysis for CAP 2.0.

Commissioner Joesten asked about the level of electric vehicle infrastructure being planned for the new Civic Center and requested that information be provided. Commissioner Joesten moved, and Chair Paton seconded, a motion to add to the June meeting agenda an item to review and discuss the amount of EV infrastructure being planned for the Civic Center, if such an item was needed based on the information provided by staff. The motion carried by the following vote:

Yes: 6 - Chair Paton

Commissioner Hafeman Commissioner Joesten Commissioner Wickham Commissioner Zornetzer Commissioner Kunz

#### **No:** 0

#### STANDING ITEM: CONSIDERATION OF POTENTIAL STUDY ISSUES

Vice Chair Hafeman moved, and Commissioner Joesten seconded, a motion to add to the June meeting agenda an item to consider proposing a Study Issue on examining the feasibility of a dockless electric bicycle program in Sunnyvale. The motion carried by the following vote:

> Yes: 6 - Chair Paton Commissioner Hafeman

Commissioner Joesten Commissioner Wickham Commissioner Zornetzer Commissioner Kunz

**No:** 0

#### **NON-AGENDA ITEMS & COMMENTS**

#### -Commissioner Comments

Commissioner Wickham shared that the second event of the 2018 Sustainability Speaker Series, Hidden in Plain Bite by Katie Cantrell, was very successful and

acknowledge staff efforts in coordinating and holding the event. Commissioner Zornetzer requested that staff share the feedback received from the attendees of the first two Speaker Series events with the Commission.

Commissioner Kunz shared the top recommendations made by the Customer Program Advisory Group (CPAG), on which he serves, to the Silicon Valley Clean Energy (SVCE) Board of Directors. These recommendations included: beneficial electrification readiness assessments; bill explorer feature to educate customers on elements that drive cost of their utility bills; residential battery storage; electric vehicle charging; beneficial electrification support for customers. He noted that SVCE's priorities were aligned with making a positive climate impact.

Commissioner Joesten shared that he will be attending the Sustainability Summit of the Silicon Valley Leadership Group on May 24, 2018.

Chair Paton shared that he had helped to update the Environment Day curriculum of the Leadership Sunnyvale program and held a mini ideation workshop, modeled along the lines of the CAP 2.0 Ideas Workshop on March 3, 2018. He also shared that while conducting research into a purchase of an electrical vehicle (EV) for himself, he identified several supply chain issues with EV batteries, including environmental and social issues related to child labor.

Commissioner Hafeman noted that he had found emails from OhmConnect, a demand-response management app, useful to help him reduce his home's peak load. Commissioner Hafeman also recommended Commissioners review the last issue of the National Geographic, which focused on plastic pollution. He also shared that he attended the National River Cleanup Day event on May 19, 2018, where he observed significantly fewer plastic bags but significantly more single-use disposable dishware, particularly styrofoam, than in previous years.

#### -Staff Comments

Nupur Hiremath, Sustainability Coordinator, made several announcements including:

(1) Ramana Chinnakotla had been appointed as the new Environmental Services Department Director and would start his term on May 31, 2018;

(2) the Green@Home program, an online energy audit program, would be available to residents through June 30, 2018;

(3) the next two Speaker Series events would be held on September 26, 2018 and November 8, 2018;

(4) the Water Pollution Control Plant (WPCP) tours is re-starting community tours, with the next tour scheduled for June 23, 2018;

(5) SVCE submitted a grant application focused on a residential heat pump water heater retrofit program for \$500,000 (with a 1:1 match) to the Bay Area Air Quality District's 2018 Climate Protection Grant;

(6) the Mayor or other Councilmember would be present at the June Commission meeting to provide certificates of recognition to Commissioners who had termed out or had resigned during the past year.

She also previewed the June Commission meeting agenda items, which would include a presentation of the CAP 1.0 Biennial Progress Report findings, noting that the staff presentation on local and regional adaptation efforts would be deferred to a date later in the year.

#### **ADJOURNMENT**

The meeting was adjourned at 9:35 p.m.



#### 18-0430

Agenda Date: 6/18/2018

### REPORT TO SUSTAINABILITY COMMISSION

#### <u>SUBJECT</u>

Accept the Climate Action Plan Biennial Progress Report 2018 and Find that the Action is Exempt from Environmental Review under CEQA Guidelines Section 15378(b)(5)

#### BACKGROUND

In May 2014, the Sunnyvale City Council adopted the Climate Action Plan (hereafter CAP 1.0), which outlines the City's path toward mitigating climate change while fostering a sustainable, healthy, and livable community. CAP 1.0 summarized Sunnyvale's greenhouse gas (GHG) emissions for year 2008 (baseline year) and identified mitigation strategies for reducing emissions. These strategies, if implemented, would enable the City to: (a) exceed the state-recommended target of reducing GHG emissions by 15 percent below 2008 levels by the year 2020, which is deemed equivalent to 1990 emissions; and (b) make progress towards the State's target of 80 percent below 1990 levels by the year 2050.

In May 2016, City Council accepted the first CAP Biennial Progress Report (2016 CAP Report). This report summarized CAP 1.0 implementation progress during the 2014 calendar year, updated the City's emissions inventories, and revised the schedule for CAP measures to be implemented through 2020. The 2016 CAP Report estimated that the City's emissions were approximately 15 percent below baseline (2008) levels as of 2014 and that the City was on track to meet the State's 2020 target.

The City Council is scheduled to consider this item on July 17, 2018.

#### EXISTING POLICY

#### Climate Action Plan (CAP)

- Outlines Sunnyvale's path to "creating a more sustainable, healthy, and livable Sunnyvale."
- The CAP is intended to "streamline future environmental review of development projects in Sunnyvale by following the California Environmental Quality Act (CEQA) Guidelines for a Qualified GHG Reduction Strategy."

#### General Plan

#### Chapter 2: Community Vision - Citywide Vision Goals

• *Citywide Vision Goal III, Environmental Sustainability* aims to "promote environmental sustainability and remediation in the planning and development of the City, in the design and operation of public and private buildings, in the transportation system, in the use of potable water and in the recycling of waste."

#### Chapter 3: Land Use and Transportation

• Goal LT-2: Environmentally Sustainability Land Use and Transportation Planning and

*Development* aims to "Support the sustainable vision by incorporating sustainable features into land use and transportation decisions and practices."

 Greenhouse Gas Reduction Policy LT-2.2 aims to "Reduce greenhouse gas emissions that affect climate and the environment though land use and transportation planning and development."

Chapter 5: Housing

Goal HE-6 Sustainable Neighborhoods, Sustainability Policy states Sunnyvale has adopted a
sustainability policy to become "a regional leader in environmental sustainability, advocating to
reduce dependence on non-renewable resources by providing greater transportation options,
reducing waste, protecting our natural resources, and promoting alternative energy usage and
research."

#### ENVIRONMENTAL REVIEW

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(b)(5) in that it is a governmental organizational or administrative activity that will not result in direct or indirect changes in the environment.

#### DISCUSSION

The second CAP 1.0 progress report (2018 CAP Report) summarizes implementation progress through 2017 and provides a 2016 community-wide emissions inventory (see Attachment 2) using the most recent data available. This report has been restyled to be more accessible and interesting to a wider audience, in alignment with one of the CAP goals of enhancing community awareness about sustainability topics and efforts.

Emissions summarized in this report reflect calendar year 2016 due to a lag in data availability from external sources (such as PG&E and other agencies). Of note is the 2017 rollout of Silicon Valley Clean Energy (SVCE), Sunnyvale's community choice energy program, which was identified as the action with the single most meaningful GHG impact in the City's adopted CAP. Preliminary data from the implementation of SVCE's program in 2017, which characterized a significant shift in the citywide load to carbon-free electricity, were applied to the 2016 community-wide emissions to better illustrate SVCE's impact.

Staff is continuing to implement CAP 1.0 and concurrently working on Council's priority to accelerate climate action via CAP 2.0. To ensure these efforts advance concurrently, CAP Report 2018 has been streamlined to focus on the status of the top priorities and achievements of CAP 1.0. To this end, the CAP Report 2018: (1) reports on 16 of 50 performance metrics in the CAP; (2) highlights broad programmatic and policy climate action achievements, rather than providing a comprehensive update on the status of all 129 climate actions in the CAP; and (3) defers the update of Work Plan 2020, which is designed to outline the short- and long-term implementation plan for actions. Staff is currently working to incorporate several CAP 1.0 actions into CAP 2.0; this will ensure continuity of ongoing efforts while balancing these with newer, more impactful actions to meet longer term targets.

#### Community GHG Inventory

The City of Sunnyvale's community inventory represents a summary of carbon dioxide, nitrous oxide, and methane emissions generated from activities undertaken by the Sunnyvale community.

Sunnyvale's community-wide GHG emissions in 2016 are estimated to be 881,000 MTCO2e, 25 percent lower than 2008 emissions (12 percent decrease since 2014), and 12 percent below Sunnyvale's 1990 levels (Figure 1).

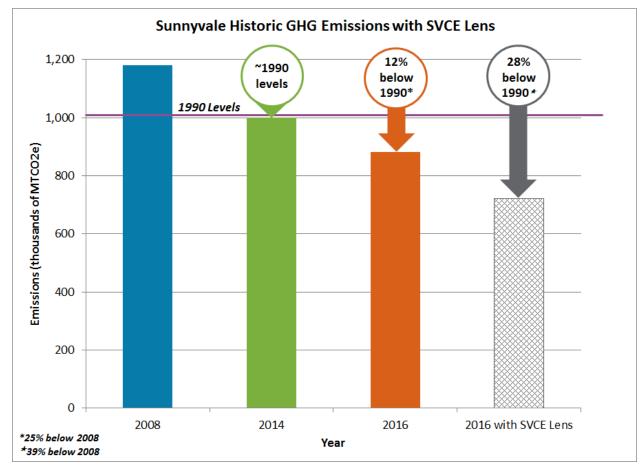


Figure 1: Sunnyvale's Historic GHG Emissions, including SVCE 2017 Lens

Preliminary data from the rollout of Silicon Valley Clean Energy's (SVCE) 100-percent carbon-free electricity shows that Sunnyvale's 2016 emissions would further drop to 39 percent below 2008 (28 percent below 1990 levels). This demonstrates meaningful progress towards the State's 2030 target (40 percent below 1990 levels). Significant GHG reductions are needed to achieve the State's longer term target for 2050 (80 percent below 1990 levels).

Emissions inventories for both 2008 and 2014 were revised with this report to reflect vehicle miles traveled (VMT) estimates from the City's recently updated (2014) travel demand model, developed by Hexagon Transportation Consultants. In addition, emissions from wastewater in the 2008 inventory were also updated to reflect the current methodology for calculating this sector's emissions and ensure consistency with the methodology used for 2014 and 2016 inventories.

Noteworthy emissions trends include:

• *Energy sector:* Emissions continued to decrease from 2014 to 2016. This decrease can largely be attributed to a 32 percent drop in PG&E's electricity emissions factor (from 435 lbs/MWh in

2014 to 294 lbs/MWh in 2016), as the utility continued to exceed the State's renewable portfolio standard. This decrease was also due in small part to a continued declining trend in both residential and non-residential electricity usage (approximately 1 percent reduction in each sector, respectively). Residential and non-residential natural gas use, however, increased by 2 percent and 4 percent, respectively, since 2014.

- *Transportation sector:* Emissions continued to increase from 2014 to 2016, which may be attributed to the growth in both population and jobs in Sunnyvale.
- Solid Waste sector: Emissions increased from 2014 to 2016. Although our diversion rate (~64% diverted away from landfill) and per capita waste disposal rate (3.6 lbs. per person per day) remained the same, the economic upturn may have led to a higher proportion of construction and demolition waste, which is included in the municipal solid waste disposed from our City.

#### CAP Implementation Results

The CAP 1.0 identifies a collection of 129 actions under 11 key goal categories. As previously noted, however, this report includes a limited report of the following elements due to the parallel effort of CAP 2.0 preparation that is underway.

The 2018 CAP Report tracks the 16 of the 50 most meaningful performance metrics identified in CAP 1.0, which are summarized in Attachment 2.

It is important to note the foundation for two key initiatives was laid in 2016 and launched in 2017:

- *Silicon Valley Clean Energy (SVCE)*, the City's community choice aggregation energy provider, commenced operations in April 2017, to provide Sunnyvale with 100 percent carbon-free electricity.
- *FoodCycle*, the City's residential and commercial food scraps collection program was initiated in fall 2017, to further increase diversion away from landfills. Initial data from the program shows a recovery rate (55 percent) for its first three months of implementation, higher than the originally anticipated 50 percent recovery based on the pilot program from 2016.

The GHG emissions impact of these programs will be fully realized in the next biennial progress report in 2020 (i.e., 2018 GHG emissions inventory).

#### FISCAL IMPACT

This action relates to acceptance of the 2018 CAP Report. There is no fiscal impact associated with this report. Additional funding recommendations will be brought to the City Council for consideration during appropriate budget cycles and with the completion of action-specific studies.

#### PUBLIC CONTACT

Public contact was made through posting of the Sustainability Commission's agenda on the City's official-notice bulletin board, on the City's website, and the availability of the agenda and report in the Office of the City Clerk.

#### **ALTERNATIVES**

1. Recommend that the City Council find that the action is exempt from environmental review under CEQA Guidelines Section 15378(b)(5) and accept the Climate Action Plan Biennial Progress

Report 2018.

2. Other direction provided by the Commission.

#### RECOMMENDATION

Recommend that the City Council find that the action is exempt from environmental review under California Environmental Quality Act Guidelines Section 15378(b)(5) and accept the Climate Action Plan Biennial Progress Report 2018.

Prepared by: Elaine Marshall, Environmental Programs Manager Reviewed by: Melody Tovar, Regulatory Programs Division Manager Reviewed by: Teri Silva, Assistant City Manager Approved by: Kent Steffens, City Manager

#### **ATTACHMENTS**

1. Reserved for Report to Council

2. Climate Action Plan Biennial Progress Report - 2018

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## Attachment 2



## **CLIMATE ACTION PLAN** 2018 Biennial Progress Report

June 2018



# **Climate Action Plan** 2018 Biennial Progress Report\_

Climate Action Plan (CAP 1.0), adopted in 2014, is the City's path toward creating a more sustainable, healthy, and livable community. This 2018 Biennial Progress Report outlines how far we have come with implementing climate actions and reducing emissions. We present accomplishments of our actions as of 2016 (2016 Highlights) and summarize efforts that will pave the way for further emissions in coming years (Active Initiatives).

Sunnyvale has achieved the State's target greenhouse gas reductions ahead of the 2020 schedule through the combined efforts of our community, partners and City staff! We remain committed to sustainability as a way of life in Sunnyvale, and look forward to continuing our work together to reduce our climate impact and improve our community's livability for future generations.

- Mayor Glenn Hendricks

## CAP 1.0 At-A-Glance

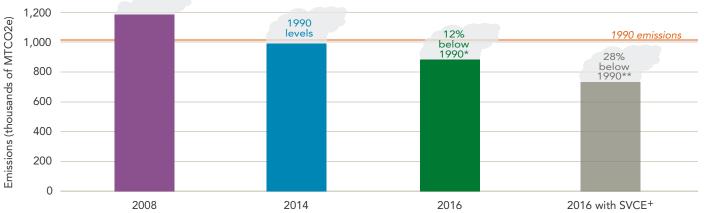
- 129 actions in goal areas
- Targets reductions by 2020 and 2035
- Baseline emissions inventory for 2008
- Focuses on energy, transportation, and waste emissions
- Community Choice Energy is the single action with the largest GHG impact

## City Reaches 2020 Target Ahead of Schedule

#### 2016 Emissions 12% Below 1990 Levels

Sunnyvale's community-wide greenhouse gas (GHG) emissions were first estimated in 2008. To meet the state's 2020 emissions target, the City has aimed to reduce emissions to 1990 levels by 2020 (equivalent to 15 percent below the 2008 baseline).<sup>†</sup> The City's community-wide emissions inventory provides an update on our progress towards this target. It is updated every two years and follows nationally and internationally accepted protocols for developing community GHG inventories.

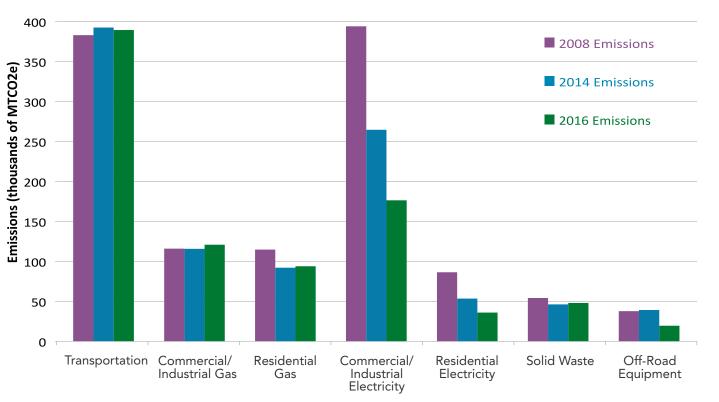
Community-wide emissions in 2016 were approximately 12% below 1990 levels. Silicon Valley Clean Energy – the action with the greatest GHG reduction potential in the CAP – was launched in 2016 and started providing service in 2017. To recognize the large impact of this single action, 2016 emissions are shown with 2017 SVCE data (grey column) to demonstrate that an estimated 28% reduction below 1990 levels is possible.



†The 2008 baseline is referenced in lieu of 1990 throughout this report, as 1990 data are not readily available.
\*25% below 2008. \*\*39% below 2008. + Estimated impact of SVCE by applying preliminary 2017 SVCE enrollment data to the City's 2016 emissions.

## Emissions Sources & Trends.

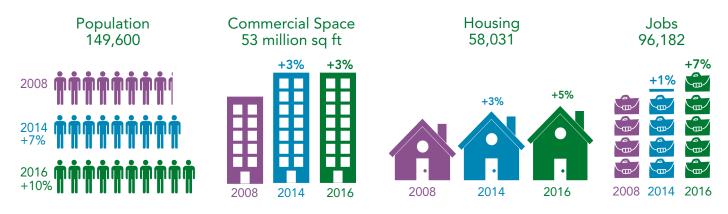
Emissions declined compared to 2008 and 2014 across all sectors except Natural Gas, Transportation and Waste.



Emissions from water, wastewater, and Caltrain, which are <2% of community-wide emissions, are not shown.

## Demographic Drivers

Sunnyvale's emissions are greatly influenced by our community's demographics, including population growth, available jobs and housing, and development. Emissions are also influenced by available technologies, energy procurement practices, and individual behaviors. Since 2008, Sunnyvale experienced significant growth in population, jobs, and construction. These upward trends are correlated with higher emissions from: Transportation, as more single-occupancy vehicles commute to and from Sunnyvale; and waste, as more construction and demolition waste is generated from the rapid pace of development. Despite these upward trends, however, overall emissions decreased. This decrease can largely be attributed to significantly cleaner electricity supplied by PG&E, more energy efficient buildings, and increased energy conservation efforts.



2014 and 2016 data reference 2008 as baseline.

# Mobility 2016 Highlights



2016: 1.6% commuters ride bikes to work 2014: 1.4% 2008: <1%



2016: 38% students walk or ride bicycles to school 2014: 41% 2008: 14%



2016: 132 miles of exclusive bicycle paths and separated lanes 2014: 121 miles 2008: n/a



#### Safer Bicycle Lanes

Nearly 11 miles of new designated on-road lanes for bicycles were added. Safer bicycle lanes may encourage more riding and less driving.



2016: 1,860 electric vehicles in use 2014: 810 2008: n/a



2016: 2,034 public & workplace EV chargers 2014: 467 2008: n/a



2016: 15.9 daily vehicle miles traveled per person 2014: 15.7 miles 2008: 15.7 miles



**2016: 909,000 Caltrain riders per year** 2014: 746,000 riders 2008: 496,000 riders

#### Integrated Bicycle and Pedestrian Safety Plan

The new integrated Bicycle and Pedestrian Safety Plan (expected 2018) aims to improve roadway safety and mobility for all road users. Safer streets will encourage walking or bicycling and help reduce transportation emissions.



# **Energy Efficiency and Clean Energy**

## 2016 Highlights

2016: 900 residential units exceeding green building standards 2014: 630 units 2008: n/a



2016: 3.8 million square feet of commercial space exceeding green building standards 2014: 2.6 million sq. ft. 2008: n/a



### **Green Buildings**

Green building square footage increased by 34% since 2014 with the City's award-winning incentive-based Green Building Program.

### **Clean Energy**

As of 2017, 98% of residential and commercial accounts receive carbon-free electricity from Silicon Valley Clean Energy. All City facilities are powered by 100% renewable energy.





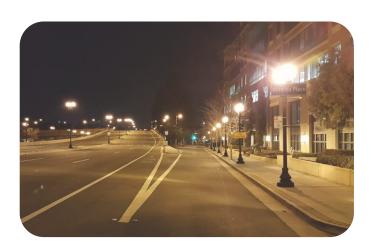
**2016: 1,910 street lights converted to LED** 2014: 1,860 2008: 0



2016: 18 energy efficiency rebates through PACE 2014: 9 rebates 2008: PACE not operational



2016: 13,230 kW of rooftop solar on homes & offices 2014: 9,790 kW 2008: n/a



### Low-energy Lighting

The City is converting 9,500 streetlights across residential and downtown neighborhoods. The new "smart" streetlights use 75% less energy.

# Natural Resources 2016 Highlights





2016: 101 gallons of daily water use per person 2014: 114 gal 2008: 156 gal



#### Expansion of Recycled Water System

With large-scale capital improvements underway at the Water Pollution Control Plant, the City is continuing to improve its recycled water infrastructure and distribution network.

2014

2016



**2016: 64% of waste diverted from landfill** 2014: 64% 2008: 60%



2016: 3.6 lbs. of waste disposed daily per person 2014: 3.6 lbs. 2008: 4.1 lbs.

#### Less Landfilled Waste

55% of residential food scraps were collected in fall 2017 through the new FoodCycle program. Converting food scraps into animal feed will continue to reduce landfilled waste.



# **Active Initiatives**



## Climate Action Plan Update (CAP 2.0)

Sunnyvale's updated CAP 2.0 will contain strategies for reducing emissions by 40% by 2030 and by 80% by 2050 or sooner (relative to 1990 emissions). CAP 2.0 is expected to be adopted December 2018, with implementation planned in the coming years.

#### New Green Civic Center

The new City Hall will be a LEED-Platinum building with sustainable features including living roofs, natural lighting and ventilation, and on-site solar generation.

#### Green Building Program Update

The City is revamping its Green Building Program to meet or exceed the state's CalGreen Tier 1 standards.





#### Heat Pump Water Heater Study

The City Council has approved a study for 2018 to assess the benefits and feasibility of implementing a program to encourage fuel switching from natural gas to electric heat pump water heaters.

# Be A Climate Hero!



It's easy to do your part to reduce emissions!



- **Drive less;** walk or ride more. It's good for the air and your health! Use the new Sunnyvale Bike Map (available on the City's website) to find your best route.
- **Opt-up to 100% renewable electricity** through Silicon Valley Clean Energy's GreenPrime program.



- **Separate your food scraps.** Help meet our community's zero waste goal by 2020.
- **Shop local, eat healthier, waste less.** Support local farmers so that food travels shorter distances. Buy in bulk to reduce packaging trash.



- **Understand your carbon impact.** Download the free IGreenSunnyvale app on your smart phone and track the environmental impact of your sustainable actions.
- Get the latest sustainability news and events. Follow Sunnyvale Environmental Services on Facebook or subscribe to the Sustainable Sunnyvale enewsletter (email green@sunnyvale.ca.gov).

## Contact

Environmental Services Department www.sunnyvale.ca.gov/people/sustainability | green@sunnyvale.ca.gov | 408-730-7717



Agenda Date: 6/18/2018

Review and Discuss Potential EV Charging Infrastructure Planned for new City Hall



Agenda Date: 6/18/2018

Proposed Study Issue: Implement a Dockless Bicycle Share Program in Sunnyvale



Agenda Date: 2/16/2018

#### 2018 COUNCIL STUDY ISSUE

#### NUMBER

DPW 18-08

**<u>TITLE</u>** Develop a Dockless Bicycle Share Pilot Program

#### **BACKGROUND**

Lead:	Public Works
Support Departments:	Office of the City Manager
	Office of the City Attorney
Sponsor(s):	Interim City Manager
History:	1 year ago: N/A
	2 years ago: N/A

#### SCOPE OF THE STUDY

#### What precipitated this study?

There are opportunities for the City to expand multi-modal transportation options for the community by incorporating a dockless bicycle share program. Dockless bikes do not require a permanent docking station to house the bikes; they can be picked up and dropped off anywhere, with their location tracked by a Global Positioning System (GPS) device attached to the bike. The City previously considered the deployment of a bike share program that required docking stations, but that program was not feasible for the City at that time.

Recently, several private bicycle share companies have expressed interest in starting dockless bike share operations in Sunnyvale. Before a permanent dockless bike share program is established, the City can participate in a pilot program to determine long-term viability and identify possible concerns. The result of the pilot program will lead either to a recommendation to incorporate a permanent dockless bicycle share program, recommend further study, or recommend dropping the program.

#### What are the key elements of the study?

For the pilot program, the City will invite vendors to provide bicycles to the public for daily or shortterm rental. The City will provide locations at key areas where pedestrians are likely to make short and mid-range trips and may choose to use a bicycle. Vendors choosing to participate in the pilot program will do so at no cost to the City, and will be allowed to incorporate their pricing structure for the bicycle rentals. The program will be in place for a specified period (approximately six months) and no permanent infrastructure will be required during the pilot program.

#### Estimated years to complete study: 1 year

#### FISCAL IMPACT

#### Cost to Conduct Study

Level of staff effort required (opportunity cost):	Moderate
Funding Required for Non-Budgeted Costs:	\$0
Funding Source:	N/A

#### Cost to Implement Study Results

Unknown. Study would include assessment of potential costs, including capital and operating, as well as revenue/savings.

#### EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No Council Study Session: No Reviewed by Boards/Commissions: Pedestrian and Bicycle Advisory Commission

#### STAFF RECOMMENDATION

Support. This policy issue merits discussion at the 2018 Study Issues Workshop.

The City of Sunnyvale has been approached by vendors interested in providing a dockless bicycle share pilot program at no cost to the City for a limited period. In addition, several neighboring jurisdictions are considering or proceeding with similar bicycle share pilot programs. Before committing infrastructure, cost and staff time to a permanent dockless bicycle share program, the pilot program will enable the City to test the long-term viability of the program and identify possible concerns.

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