



DATE: August 10, 2020

AGENDA ITEM #3

TO: Environmental Commission
FROM: Emiko Ancheta, Staff Liaison
SUBJECT: Environmental Commission Work Plan

RECOMMENDATION:

Review and take action, as appropriate, on the 2020/21 Environmental Commission Work Plan

BACKGROUND

The Environmental Commission met in a Joint Meeting with the City Council on May 5, 2020 to review the Commission's 2019/20 Accomplishments and Draft 2020/21 Target areas and discussed issues and projects for the upcoming year. Based on this discussion, the targets were finalized, and the 2020/21 Work Plan was developed. The Targets and Work Plan are intended to focus the Commission's agenda items and will serve as a roadmap for projects and actions, as appropriate, during the 2020/21 year.

DISCUSSION

Environmental Commission Targets and resulting Work Plan for 2020/21 are:

1. Climate Action Plan
2. Water Conservation and Stormwater Management
3. Solid Waste Diversion
4. Community Outreach and Education

The Commission will review the targets, projects, and status updates at each of its monthly meetings and act appropriately.

ATTACHMENT:

- A. 2020/21 Targets and Work Plan
- B. Reach Code Webpage Update
- C. Reach Code FAQ Update
- D. Single-Use Plastics Survey
- E. SVCE EV Charging Programs

ENVIRONMENTAL COMMISSION

2020/21 Targets & Work Plan

August 10, 2020

Targets	Projects	Assignments	Target Date	City Priority related to	Status
Climate Action Plan	Building and Electric Vehicle Reach Codes	<ul style="list-style-type: none"> Subcommittee -Don Weiden, Laura Teksler and Lei Yuan 	Fall 2020	CAP Goals	<ul style="list-style-type: none"> November 19, 2019, City Council directed the EC and City staff to pursue an All-Electric Reach Code Ordinance and conduct outreach Reach Code community webinar held April 29, 2020 EC, Subcommittee and staff revised ordinance, reviewed outreach feedback and recommended All-Electric Building Reach Code Ordinance Reach Code Ordinance on Council Agenda in Fall 2020 Reach Code webpage updated July 2020
	Update of City's CAP	<ul style="list-style-type: none"> Subcommittee- Bruno Delagnaeu, Raashina Humayun to work with staff and Subconsultant 	Monthly	CAP Goals	<ul style="list-style-type: none"> Budget for consultant confirmed and staff will discuss next steps with City management team EC to work with staff and consultant to update the City's Climate Action Plan RFP final draft under review by staff
Water Conservation & Stormwater Management	Green Infrastructure and Other Environmental Plans	<ul style="list-style-type: none"> Assist staff in implementation of the Green Infrastructure Plan and development of other Environmental Plans 	Monthly	Storm Water Regional Discharge Permit and other Environmental Related Plans	<ul style="list-style-type: none"> Staff made a presentation of the Green Stormwater Infrastructure Plan to the Environmental Commission on May 13, 2019 This was approved by City Council on July 9, 2019 Staff is developing an update to the Integrated Pesticide Management (IPM) policy Manny Hernandez presented IPM policy update to EC at the July 13, 2020 EC meeting

Solid Waste Diversion	Solid Waste Disposal Contract	<ul style="list-style-type: none"> Subcommittee- Don Weiden, Laura Tekler and Bruno Delagneau 	Agreement executed April 2020	Solid Waste Disposal	<ul style="list-style-type: none"> The Mission Trails Waste System (MTWS) Contract was approved by City Council on Oct. 22, 2019 The MTWS Contract extension will be finalized in 2020 The Amended and Restated Collection Service Agreement between the City of Los Altos and MTWS was executed on April 23, 2020 Staff to work with consultant to coordinate communication and public education
	Investigate initiatives on limiting single use plastics	<ul style="list-style-type: none"> Subcommittee- Don Weiden, Laura Tekler and Bruno Delagneau 	Monthly	Recycling	<ul style="list-style-type: none"> Andrea Trese and Emiko Ancheta, the Los Altos representatives for the Ad Hoc Model Foodware Ordinance Committee Council directed staff to modify ordinance, conduct internal review and present ordinance to Council by Dec. 2020 Survey of food and beverage establishments currently being conducted August to September 2020 Draft ordinance to be presented to EC in September/October 2020
Community Outreach & Education	Develop program in collaboration with the Los Altos History Museum	<ul style="list-style-type: none"> Environmental Education Fund held by LACF David Klein 	June 2020	Public outreach and education	<ul style="list-style-type: none"> EC coordinates with History Museum for Apricot Stem Fair; EnviroThon Challenge held at the annual Apricot STEM Fair All City events cancelled/postponed for 2020 due to COVID-19 David Klein to follow up on Education fund allocation
	Update environmental measures on the City web site	<ul style="list-style-type: none"> David Klein 	Ongoing	Public outreach and education	<ul style="list-style-type: none"> The City's Public Information's Officer, Sonia Lee will work together with staff and Subcommittee on updating the City's website, including the Environmental Resources Dashboard Reach Code webpage updated July 2020
	Continue gas-powered leaf blower (GPLB) ban outreach and education	<ul style="list-style-type: none"> Laura Tekler 	Ongoing	Public outreach and education	<ul style="list-style-type: none"> Linda Ziff gave an update on her team's efforts to educate about the GPLB at the March 9, 2020 EC meeting

Continue anti-idling outreach and education	<ul style="list-style-type: none"> • Don Weiden 	Ongoing	Public outreach and education	<ul style="list-style-type: none"> • On June 10, 2019, the Los Altos HS Survey Results were presented • The EC has been supporting the efforts of Greentown Los Altos
Continue to support SVCEA community outreach and education		Ongoing	Public outreach and education	<ul style="list-style-type: none"> • Reach Code webinar was held April 29, 2020
Assist staff with various outreach and education efforts	<ul style="list-style-type: none"> • Climate Action Plan • Water Conservation • Storm Water Management • Solid Waste Diversion • Urban Forest / Trees • Downtown Vision 		Public outreach and education	



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Reach Code Webpage Update as of July 2020

What are Reach Codes?

Every three years, the State of California adopts a new Building Standards Code contained within Title 24 of the California Code of Regulations. Cities may adopt new building standards codes that are more advanced than those required by the state, commonly known as Reach Codes.

What is the Environmental Commission recommending to the City Council?

The Environmental Commission recommends City Council adopt a 100% Electric Building and Additional Electrical Vehicle Charging Infrastructure Reach Codes for newly constructed buildings. An all-electric building means that all appliances, including space and water heating, cooking appliances and clothes dryers, run on electricity. The codes would permit conditional exceptions only when the applicant shows that there is a public or business-related need that cannot be reasonably met with an electric-fueled appliance or piece of equipment. The recommended Electric Vehicle Charging Infrastructure Reach Codes increase the capacity to charge electric vehicles in newly constructed buildings.

Reach Codes WOULD apply when you:

- Construct a new residential, commercial, multi-family, ADU or mixed-use building

Reach Codes WOULD NOT apply when you:

- Replace appliances or equipment in an existing building (i.e. water heater, furnace, stove)
- Remodel or alter an existing building
- Add square footage to an existing building

- Make exterior alterations to an existing site (i.e. backyard BBQ, fire pit, pool heating)

Why is the Environmental Commission recommending the City Council adopt Reach Codes?

- Improves new building [health and safety](#) for occupants
- Reduces new building construction costs*
- Realizes cost effectiveness over the building life*
- Helps transition City's building stock to State's planned phase-out of Natural Gas infrastructure
- Reduces greenhouse gas emissions within the City
- Supports the Los Altos Climate Action Plan
- Supports the [City Council's Strategic Goals and Objective](#) No. 7 on the Environment
- Supports [Silicon Valley Clean Energy Authority's](#) Building Electrification and Electric Vehicle Infrastructure Goals (9 of the 13 member agencies have approved Reach Codes and 3 are considering Reach Code proposals)
- Supports [State of California Greenhouse Gas Reduction Goal](#)

* [CA Statewide Investor Owned Utilities Codes and Standards Program Study](#)

What steps did the Environmental Commission take to determine its Reach Code recommendation?

The Environmental Commission began investigating actions to reduce greenhouse gas (GHG) emissions upon adoption of the Los Altos Climate Action Plan in December of 2013, focusing on Transportation and Building as they are the largest sources of GHG emissions in Los Altos. In 2016 the City joined Silicon Valley Clean Energy Authority and the Environmental Commission established a Green Building Subcommittee. The subcommittee prepared a report that was presented to Council in June 2017 that included a recommendation for promoting 100% electric buildings and enhanced Electric Vehicle Charging Infrastructure. Another subcommittee was established that began investigating the Building Standards Reach Codes. Members of the subcommittee attended informational webinars, conducted research and met with City staff to learn about the 2019 building code and reach code alternatives. The subcommittee reported findings and discussed the issue with the Environmental Commission during many of its meetings throughout 2019 and 2020. As a result of that investigation, the Commission found that Reach Codes offer significant

potential to reduce GHG emission and reduce the City's carbon footprint in a cost-effective manner.

On November 19, 2019, the Environmental Commission Subcommittee presented the first draft Reach Code ordinance to the City Council that included a mixed-fuel higher efficiency option in addition to all-electric. Council directed the Commission to pursue an All-Electric Reach Code ordinance and conduct community outreach. The Reach Code web page was established on the City website and a community webinar was hosted on April 29, 2020. Two public (web page based) surveys were conducted on the Reach Codes, prior to and after the Reach Code webinar. In addition, the Environmental Commission held public discussions at multiple commission meetings.

The Environmental Commission Subcommittee will present all results and ordinance recommendation to the City Council in Fall 2020 (tentatively scheduled for September).

Where can I find more information and details on the Reach Codes? -

- Environmental Commission April 29, 2020 [Webinar](#)
- Environmental Commission April 29, 2020 [Webinar Question and Comment Responses](#)
- Environmental Commission [Surveys and Results](#)
- Environmental Commission [Meeting Agenda](#)

Resource Documents

- [Peninsula Reach Codes](#)
- [Regional Reach Code resources from Silicon Valley Clean Energy](#)
- [BayREN's Guide to Understanding and Adopting Reach Codes](#)
- [Reach Code Ordinances](#) (past reach codes adopted by local gov. across CA)
- [Statewide Cost-Effectiveness Study-Residential](#)
- [Statewide Cost-Effectiveness Study- Non-Residential](#)
- [2019 Building Energy Efficiency Standards](#)
- [SVCE Frequently Asked Questions](#)
- [EV Infrastructure Cost Analysis](#)
- [Statewide Toolkit for Adopting Reach Codes](#)
- [PG&E's June 23, 2020 Letter to CA Energy Commission](#) (supporting building electrification and ability to serve)

- [PG&E Power Content Label](#)
- [SVCE Power Content Label](#)
- [UCLA Fielding School of Public Health Study](#)
- [Rocky Mountain Institute-Health Effects of Gas Stoves](#)
- [PG&E Rebate Programs o PG&E Energy Savings Program](#)
- [SVCE HPWH Rebate Program](#)
- [SVCE Customer Resource Center](#)

If you have questions or would like to get more information about Reach Codes, please submit your questions here:

[Reach Code Question Form](#)



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Reach Code Webpage FAQ Update as of July 2020

Frequently Asked Questions

Why is Los Altos proposing the adoption of reach code ordinances?

The City of Los Altos strives to balance the safety and needs of our residents, while also providing a healthy and sustainable environment to thrive in. As part of our commitment outlined in our Climate Action Plan, Los Altos incorporates all measures to reduce our greenhouse gas (GHG) emissions. In California, the use of natural gas for heating of air and water in building is the second largest GHG contributor after transportation.

The City of Los Altos Environmental Commission prepared a Green Building Subcommittee Report in 2017 which identified 100% electric buildings and increased Electric Vehicle Charging Infrastructure as two areas the City should focus its green building efforts. The Reach Codes offer significant potential to reach these goals while reducing our City's carbon footprint.

Will the residents of Los Altos vote on this Reach Code proposal?

As is standard for all local building ordinances, the Reach Code ordinance will be presented to the Los Altos City Council for a vote. If approved by the Council, the ordinance is then submitted to the California Energy Commission for review and approval prior to implementation.

Are there advantages to an all-electric building?

The main benefits of an all-electric building are lower carbon emissions, better indoor air quality, and a much safer home than one with natural gas appliances. Gas appliances release harmful pollutants such as nitrogen dioxide, formaldehyde and particulates into the air, creating unhealthy indoor air quality. Cooking emissions can lead to pollutant levels in the home that exceed legal outdoor limits and exacerbate asthma and respiratory disease. The combustion of natural gas also has safety risks such as gas leaks and fires both during construction and after. There is also a cost benefit to building all-electric as opposed to mixed-fuel construction. All-electric buildings eliminate the cost to install the natural gas infrastructure, resulting

in a lower overall construction cost to the building. Another benefit is that electric heat pump appliances and equipment (such as water heaters/air conditioning/heaters) are four to five times more efficient than equivalent natural gas appliances. Additionally, having an all-electric home makes it easier to offset your energy use with site-generated solar power. Cost analysis studies that examine the maintenance costs, operational cost and initial costs associated with buildings show all-electric designs more cost effective than mixed-fuel buildings.

Are there disadvantages to all-electric construction?

Older electric appliances, such as stoves and heaters, were expensive to operate and often did not perform well. Based on that experience, many people prefer cooking on gas cooktops and worry electric heaters will be expensive and inefficient. However, new electric appliances perform much better, particularly heat-pump heaters and induction cooktops. Still many people state a strong preference for cooking with natural gas as well as the ability to have a natural gas indoor fireplace. Some building industry professionals may not yet be familiar and experienced with designing and installing electric appliances, such as heat-pump water heaters. Electric heat pump water heaters can take up more space than tankless gas water heaters as they include a hot water storage tank. Some of the other stated concerns, such as cost and over-reliance on a single-fuel particularly during electric power outages are further discussed in other answers below.

How will the Reach Codes affect me?

The proposed Reach Code Ordinance currently under consideration in Los Altos will apply to newly constructed buildings for residential, commercial and mixed-use purposes. If you are planning a remodel, tenant improvement or appliance/equipment replacement, the Reach Codes will not affect your project.

Will the City of Los Altos proposed Ordinance be the same as Berkeley's natural gas ban?

No. There are two main ways to encourage the construction of all-electric buildings: (1) Through amendments to the Energy Code, which is what the City of Los Altos and many neighboring jurisdictions are proposing; and (2) By amending the Land Use Code, which is what Berkeley did by banning all future installation of natural gas infrastructure. The City of Los Altos proposed Reach Code Ordinance would only apply to newly constructed buildings. Natural gas appliances would still be permitted for exterior use, such as pool heating, fire pits and BBQs.

Where can I find the cost-effectiveness study?

The statewide study covers all geographical regions in California. The 2019 cost-effectiveness studies can be found on the CA Local Energy Codes website, [found here](#).

I'm building a new house, won't it cost more to build and operate an all-electric home?

The cost analysis performed shows that while a new all-electric home costs \$7 per month more to operate, it is over \$10,000 less expensive to construct. If those construction savings are invested in additional solar, the per month operating costs end up being \$5 per month cheaper. The California Energy Commission requires a cost effectiveness study be completed and they must approve any reach code, so the reach code cannot add significant cost to the combined building and operating costs.

Will my overall energy costs go up with an all-electric home? Isn't electricity more expensive than natural gas?

The monthly energy cost of running an all-electric home will vary based on many factors, including size, efficiency of appliances and size of photovoltaic system. The complete cost effectiveness study can be found [here](#).

Isn't it better to have gas appliances in case of PG&E electric power outages?

Most new gas appliances require an electric ignition and will not operate during power outages. New all-electric homes can be designed to be resilient to power outages by incorporating battery storage into the solar PV system.

Can induction cooktops compare to gas cooktop?

We all have our preferences when it comes to cooking. Traditionally, we have become accustomed to cooking on a gas range. Recently induction cooktops have become more widespread and are gaining in popularity as they provide a more specific temperature and are easier to control. Since the appliance responds to magnetic cookware, it is safer and can prevent burns. Research shows there can be a variety of health risks associated with gas cooking including exposing building occupants to levels of nitrogen dioxide, formaldehyde, and carbon monoxide in excess of the current standard allowable range. Gas stovetops have been linked to higher asthma rates in children.

How can our electricity be carbon-free? Can renewables meet our energy demands at night?

Renewable sources, such as solar and wind, are supplemented by other carbon-free sources such as hydroelectric to meet 24-hour energy needs. As our energy infrastructure continues to change, we expect to see more storage solutions that will enable the power grid to store power generated during peak production periods for use during low-production periods.

Isn't the climate change impact of reach codes minimal compared to other carbon sources like airplane and car travel?

Yes, there is a lot of work to be done to address the climate change issue, as part of your city government we are focusing on the actions we can take right now at the local level. Over time, the reach codes will lead to a de-carbonized built environment as more and more of our housing stock is replaced. If we miss this opportunity to put electric infrastructure in place now, new buildings will continue to rely on natural gas for their decades-long lifespans. Transportation continues to be a large portion of our emissions both on the national and state level (in 2018 58% of Los Altos' GHG emissions were attributed to transportation). We have started to see a reduction in this percentage thanks to the increasing number of electric vehicles. Natural gas use is the second largest source of Los Altos' emissions.

Why not just require solar panels on new buildings?

California's new 2019 building code already requires solar photovoltaics (PV) for all new low-rise residential construction

What about natural gas-powered generators?

The proposed reach codes do not preclude the installation of natural gas generators outside the residence or building.

Are there any rebates or incentives for switching to electric appliances/equipment?

The following links provide information about rebates and other programs to assist you with switching to electric appliances, electric vehicle purchase, tips to reduce energy use and more:

- [PG&E Rebate Programs](#)
- [PG&E Energy Savings Program](#)

- [SVCE HPWH Rebate Program](#)
- [SVCE Customer Resource Center](#)



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Single-Use Plastics Survey

Survey of Los Altos Food and Beverage Establishments, open from August 3, 2020 to September 11, 2020

Single-Use Plastic Accessories are plastic items used only once before they are thrown away such as plastic straws, utensils, coffee stirrers, and toothpicks. We are looking for input specifically as it relates to your use of Single-Use Plastic items in your establishment.

1. What is your facility type?

- Cafe
- Coffee/Tea/Juice
- Restaurant
- Other _____

2. Approximately how many Plastic Straws do you currently have in stock at your facility?

- 1-1,000
- 1,000-5,000
- 5,000-10,000
- >10,000
- None
- Other _____

3. Approximately how many Plastic Straws do you typically use in a month?

4. Approximately how many Plastic Utensils/Cutlery items do you currently have in stock at your facility?

- 1-1,000
- 1,000-5,000
- 5,000-10,000
- >10,000
- None
- Other _____

5. Approximately how many Plastic Utensils/Cutlery items do you typically use in a month?

6. Approximately how many Plastic Stirrers do you currently have in stock at your facility?

- 1-1,000
- 1,000-5,000
- 5,000-10,000
- >10,000
- None
- Other _____

7. Approximately how many Plastic Stirrers do you typically use in a month?

8. Approximately how many Plastic Plugs (lid inserts that prevent beverage from spilling) do you currently have in stock at your facility?

1-1,000

1,000-5,000

5,000-10,000

>10,000

None

Other _____

9. Approximately how many Plastic Plugs (lid inserts that prevent beverage from spilling) do you typically use in a month?

10. Approximately how many Plastic Toothpicks do you currently have in stock at your facility?

1-1,000

1,000-5,000

5,000-10,000

>10,000

None

Other _____

11. Approximately how many Plastic Toothpicks do you typically use in a month?

12. Do you have any other Plastic Accessory Items in stock at your facility? (Answers to this question should NOT include, cups, cup lids, plates, bowls, or containers. Please only list other “accessory” items similar to those listed in the questions above.)

13. Does your facility use compostable or reusable alternatives to any of the items listed in the survey above? If so, please list or describe them here.



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SVCE's EV Charging Programs

Information provided below is directly from [SVCE](#):

- **CALeVIP:** Incentives available for new Level 2 and DC Fast Charging installations in the South Bay area. SVCE committed \$6M in funding, and an additional \$6M is available from the California Energy Commission, through the local California Electric Vehicle Infrastructure Project (CALeVIP). See the CALeVIP website for more details <https://calevip.org/find-project>
- **FutureFit Assist - EV Charging:** SVCE offers help and technical assistance to small/medium business and multifamily properties with the EV charging installation process. Available help for approximately 60 applicants to navigate through the steps. Visit the webpage to learn more and apply <https://www.svcleanenergy.org/ev-charging-assist/>
- **Silicon Valley Transportation Electrification Clearinghouse:** SVCE regularly convenes EVSE stakeholders focused on accelerating transportation electrification in the South Bay. Reps from leading business and public sector organizations, EVSE providers, and local institutions meet quarterly to identify and help direct new sources of funding to our region, and overcome barriers such as permitting complexity and future-proofing. Join here at: <http://svcleanenergy.org/svtec>
- **Regional Recognition:** SVCE is interested in identifying existing EV charging sites to acknowledge and promote through the Regional EVSE Recognition program. Applications are currently being accepted and applications must be received by **August 31, 2020**. Apply here: <https://www.svcleanenergy.org/regional-recognition/>