DATE: July 13, 2020

AGENDA ITEM #4

TO: Environmental Commission

FROM: Emiko Ancheta, Staff Liaison

SUBJECT: Receive report and updates on Silicon Valley Clean Energy Authority (SVCEA)

RECOMMENDATION:

Receive report and updates on SVCEA Board of Directors and Member Agency Working Group (MAWG) meetings

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BACKGROUND

State and Local Mandates

State Assembly Bill 32, the Global Warming Solutions Act, was signed into law in 2006 and directed public agencies in California to support the state-wide target of reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. In addition, California adopted ambitious energy and environmental policies to reduce state-wide greenhouse gas (GHG) emissions to 40% of 1990 levels by 2030 and, to provide 33% of electricity demands in 2020 from renewable resources utilizing clean energy technologies and environmental benefits.

To address the reduction of GHG emissions at the local level, the City Council adopted a Los Altos Climate Action Plan (CAP) on December 10, 2013. The CAP is a comprehensive strategy with goals and measurements to reduce GHG emissions within five focus areas: Transportation, Energy, Resource Conservation, Green Community and Municipal Operations. The CAP was adopted with a target of reducing the community's GHG emissions by at least 15% by 2020 and with an overarching plan for how the City can achieve up to a stretch-goal of 17% reduction in the GHG emissions by 2020.

Community Choice Energy

One method that has the potential to reduce the GHG emission associated with energy consumption is the establishment of Community Choice Energy (CCE), a system that allows cities, counties and Joint Power Authorities (JPA) to aggregate the purchasing power of an identified customer base within a defined area to secure alternative energy supply contracts with the goal of increasing the percentage of energy from renewable sources. The purchase of alternative energy supplies includes renewable sources such as hydroelectric, wind and geothermal as opposed to non-renewable fossil fuels such as coal, oil and natural gas. The consequences inherent in the use of fossil fuels to generate energy are particularly high carbon dioxide equivalents or GHG emissions which contribute to global warming. The ability to form CCEs has been adopted into law in California and a few other states.

Council Actions

City Council convened a study session on Community Choice Aggregation (Energy) on March 10,

2015. On April 3, 2015, the City of Sunnyvale sent invitations to Santa Clara County cities to participate in the South Bay Technical Feasibility Study currently composed of and partnered by the Cities of Sunnyvale, Mountain View, Cupertino and Unincorporated Santa Clara County. The partnership investigated the feasibility of a Community Choice Energy program for the South Bay. On January 26, 2016, the Environmental Commission presented its Final CCE Report to Council. Council expressed appreciation to the Commission and directed staff to move forward with the necessary steps for membership in Silicon Valley Clean Energy Authority (SVCEA) and the establishment of a CCA program for Los Altos at its February 9, 2016 meeting. At its February 9 and February 23, 2016 meetings, Council finalized the steps for membership in SVCEA and establishment of a CCA for the City. SVCEA held its initial Board of Directors' meeting at the Santa Clara Board of Supervisors chambers on April 13, 2016.

SVCEA in the Los Altos Community

The Environmental Commission will review SVCEA monthly agendas, materials and meeting summary notes for purposes of discussion at its Environmental Commission meetings. In the event the subcommittee needs to convene for items pertaining to SVCEA, the meeting with be agendized to the public and will comply with requirements of the Brown Act.

Staff attends monthly Member Agency Working Group (MAWG) meetings with SVCEA and discusses updates.

DISCUSSION

SVCEA MAWG Updates (January 2020 – June 2020):

At the January 23, 2020 MAWG meeting, the group discussed the development of an online Customer Resource Center aimed at proving information on energy use, marketplace, solar and EV. The URL is targeted to go live later this year. EV infrastructure enhancement goals were discussed, and this will be managed through SVTEC to incentivize EV charging stations near Multifamily Unit Dwelling (MUD) areas. The Resilience RFP will go out to bid and focuses on storage systems and backup power. The Building Decarb Plan RFP was issued and will be evaluated on February 18, 2020. The Building Decarb Plan goal to reduce greenhouse gas emissions by 50% by 2030 through four key areas: Retail Products & Services, Education & Outreach, Public Policy and Market Transformation (see attachment A). The Community Energy Resilience Plan will seek approval from the Board later in the month and will provide SVCE member agencies the data and resources necessary for renewable energy systems. The group received the latest Reach Code update, Cupertino passed Reach Codes and their Council removed the restaurant carve out. The HPWH update shows that 53 of the 100 installations have been completed and the Board allocated funds to expand the program, more details can be found on the SVCE website.

At the February 20, 2020 MAWG meeting, the Priority Zone DCFC Program was discussed which offers incentives per charger for DCFC deployed near certain clusters of multi-unit dwelling (MUD) developments. SVCE created cluster maps that identify target areas in each jurisdiction and the maps were send out for review. The program aims to locate the chargers near the "cluster area" identified. Approximately 10 sites will be selected to receive the chargers. The Building Decarb plan RFP was completed, and the consultant contract review is scheduled for the March BOD meeting. The Heat Pump Water Heaters (HPWH) update shows that 66 out of 100 were completed/installed. All others are on a waitlist. The group received an update on the Reach Codes development throughout the

County jurisdiction. SVCE is proposing to offer tech support and this will be discussed at the March BOD meeting. BayREN training schedule was released that will offer training in March and April. They will offer training for 2019 Energy Code, 2019 Residential and Non-Residential Energy Code changes and Reach Code training, registration can be found at bayren.org.

March 20, 2020, due to the COVID pandemic and Shelter in Place orders, this meeting was held virtually via teleconference. At this MAWG meeting the Building Decarb RFP update was discussed and Integral Group was selected as the consultant, MAWG will provide updates and input at the April meeting. The group also received an update on the Community Decarbonization Program streamlining process for community electrification that aims to improve market conditions related to permitting. They will research and identify current obstacles related to the permitting process. The first phase will examine the time requirements, costs, methodology differences and gaps in institutional knowledge in the permitting process. Input on program efforts and usefulness to cities, improving scope and Best Practices Guide development will be considered.
Proposed timeline:

Date	Event
April 7, 2020	RFP issued
April 14, 2020	Pre-proposal teleconference
April 16, 2020	Deadline for questions, clarifications
April 21, 2020	Deadline for Bidders to submit proposal
April 27, 2020	Top Bidders notified of interview times, if applicable
May 1, 2020	Possible interviews of top Bidders
May 5, 2020	Anticipated date SVCE will notify awardees
May 14, 2020	Anticipated date contract finalized
May 16, 2020	Project launch
July 28, 2020	First draft presented to SVCE
July 29, 2020	Stakeholder review
August 12, 2020	Revision with stakeholder input
September 1, 2020	Project completion
**Timeline subject to change	

At the April 24, 2020 MAWG meeting, the group discussed plans to introduce the Customer Relief and Community Resilience (CRCR) program that will provide relief to SVCE residential and small business customers. The program outline will be presented at the May 13, 2020 SVCE Board of Directors meeting for review and to determine allocation amounts. The proposed allocation of funds would be split between Customer Relief, Workforce Relief and Community Resiliency. The Customer Relief funds of approximately $3 million would provide credits to residential and small business customers. The Workforce Relief funds of approximately $2 million provides professionals in the building industry additional electrification skill training and support. The Community Resiliency funds of approximately $5 million provides economic stimulus in infrastructure planning support and capital project support through Dec. 2021. The CARB Program has launched through Clean Mobility Options and will award four sites in the Bay Area $1 million each for electric-shared mobility design in low-income areas, the deadline to submit is June 1.

At the May 22, 2020 MAWG meeting, the group received an update to the Building Decarb plan and feedback was received in the areas of prioritizing decarb policies, feasibility of policy strategies and the prioritization of SVCE programs and innovations. The group provided feedback on the additional strategies and priority areas. At the meeting MAWG confirmed that the CRCR program

was approved by SVCE Board of Directors at the May 13 meeting, the funds were approved allocating $10 million to COVID relief. The program provides $3.5 million to qualifying CARE and FERA customers in the form of bill credits as well as discounts for qualifying customers. Small business customer relief is available and more information can be found on the website svcleanenergy.org. The group also received an update on the CALeVIP program. The program funds of $60 million will cover both Santa Clara and San Mateo County. SVCE territory is allocated $12 million and will leverage the CALeVIP incentives as much as possible. The program aims to address EV adoption for new construction sites in low-income areas and is scheduled to launch in Fall 2020. The group also received an update on the Online Customer Resource Center, which will provide a platform to engage and educate customers. The site will provide information on solar, electric vehicles, home energy efficiency and more. The tentative timeline shows a soft launch in June 2020.

At the June 25, 2020 MAWG meeting, the group discussed the 2020 Strategic Plan Update and next steps for the plan. The plan will be revised and updated prior to executive committee review in late Summer. The approved revised Strategic Plan is targeted for the Fall. Member agencies provided input on their Climate Action goals and decarbonization strategies that will contribute to the development of the plan. The group received updates to the Streamlining Community-Wide Electrification and the consultant is in the process of being finalized. The consultant Integral Group will be preparing an initial draft of the Building Decarb Action Plan and will share it with the group in July /August. The CRCR bill credits have been processed with over 14,000 residential and 1,300 small business customers receiving bill credits. The CRCR workforce relief training will begin in August and will consist of 150 participants and outreach continues. The Customer Resource Center which is now called eHub is live and can be accessed through svcleanenergy.org/ehub. The online center provides information to the community to educate and encourage energy efficiency to power their cars and homes with clean electricity from SVCE. There are three vendors that are provided as a resource and they are: ZappyRide, PickMySolar and Enervee.

Attachments:
A. Decarbonization Strategy and Programs Roadmap
B. Reach Code Information Chart

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Decarbonization Strategy & Programs Roadmap

Goals

Reduce greenhouse gas emissions from 2015 baseline levels by 30% by 2021, 40% by 2025 and 50% by 2030.

Strategic Framework

In addition to the overarching greenhouse gas emissions reduction goals and decarb strategies, the following, three-part strategic framework was developed through the stakeholder engagement process and used to guide development of Decarb Strategy and Programs Roadmap.

What will we do?

- **Retail Products & Services**: Develop and support innovative new products and services to meet customer needs and decarbonize
- **Education & Outreach**: Increase public awareness and education on electrification and actions to reduce emissions
- **Public Policy**: Expand state and local policy activity on decarbonization, while strengthening local and regional agency coordination
- **Market Transformation**: Catalyze market transformation through coalitions and partnerships with actors in industry and the innovation ecosystem

How will we leverage?

- **Innovation**: Harness innovation to continuously improve service to our customers and community, and to accelerate "bending the carbon curve"
- **Data**: Unlock the tremendous value of utility and other data to guide development, implementation, measurement and evaluation of all program activities
- **Partnerships**: Form and leverage partnerships to support activities addressing our decarbonization mission

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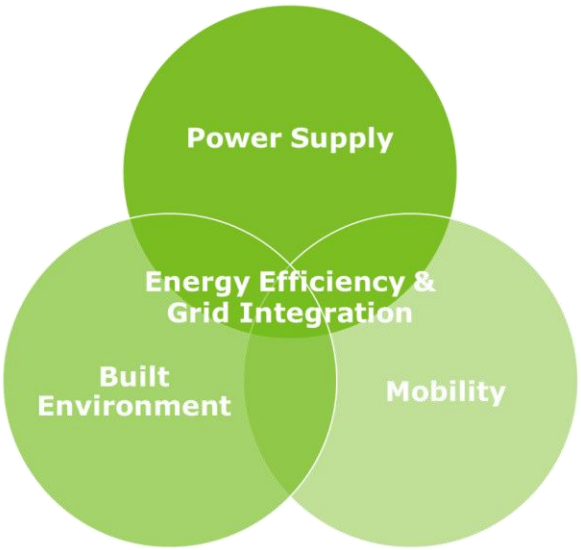
Which priorities will guide us?

- **Customer & Community Value**: Deliver value to our customers and larger community through program offerings and ongoing initiatives
- **Emissions Impact**: Prioritize activities with greatest emissions reduction potential to achieve alignment with our mission
- **Scalable and Transferable**: Pursue solutions that can be expanded and adapted by others, to ensure impact both within and beyond our borders
- **Equity in Service**: Balance activities to reflect the diversity of our customer base and geography
- **Core Role for SVCE**: Recognize activities where we can and must play a key role given our unique position of community-owned electricity provider

Decarbonization Strategy

SVCE is guided by the following overarching strategy to achieve deep decarbonization.



- Procure & maintain a sustainable, affordable and carbon-free **power supply**
- Electrify the **built environment** and **mobility**
- Promote **energy efficiency** & successful **grid integration**

SVCE will pursue the following specific strategies, organized by sector or cross-sector initiatives.

1. Achieve a sustainable, affordable and carbon-free power supply. (*Power Supply*)
    a. Seek Board input for an updated, comprehensive integrated resource plan evaluating key policy options (RPS level versus carbon-free resources, types of RPS resources, diversification of resources, location and price structures, hourly matching of load to carbon-free resources, amount of supply in long-term contracts, local renewables carve-out, distributed energy resources, etc.) and considering all trade-offs.
    b. Research the availability and costs of supply resources sited within SVCE service territory to inform prospective policies and procurement.
2. Align our clean power pricing with economic and environmental costs to encourage smart investments that support decarbonization and the grid. (*Power Supply*)
    a. Develop new retail rate products (e.g. terms-based, dedicated supply, load-following renewable supply option) for large commercial and industrial customers to be responsive to their unique needs and encourage customer retention.
    b. Carry out a retail rates assessment and develop and execute an implementation plan to address barriers and opportunities in rate design to facilitate electrification and guide smart infrastructure investments. Incorporate the statewide move to default time-of-use rates for residential customers in 2020.
    c. Evaluate and revise policies, price signals and rates for distributed generation – specifically the net energy metering successor program – to ensure consistency with SVCE decarbonization strategy and other organizational objectives.
3. Accelerate high-efficiency, all-electric new construction and retrofits. (*Built Environment*)
    a. Assess current building stock, appliance technologies, adoption rate of all-electric new construction, and other market trends/barriers to inform all building electrification activities.
    b. Promote education and awareness to encourage adoption of efficient electric technologies as replacements for natural gas appliances in retrofit and new construction.
    c. Provide support to member agencies in their consideration of all-electric building codes.
    d. Expand state policy activity to accelerate statewide baseline building codes toward all-electric, to mitigate barriers for local agencies exercising

leadership, and to align other state policies and regulations (e.g. CPUC's "three-prong test") with California's ambitious climate goals.

e. Develop a program to provide incentives and/or technical and design support for new construction, all-electric showcase projects in the community, including potential decarbonized district energy approaches such as Stanford's energy system design.

f. Design and launch a program to provide incentives to fuel-switch from natural gas to heat pump water heaters using the BAAQMD grant and SVCE match funds.

g. Facilitate coordination across member agencies to share best practices, policies, processes, and programs supporting all-electric buildings & promote advancements to the community, developers, and other practitioners operating in the service territory.

h. Pursue actions with member agencies to decarbonize their own municipal buildings.

i. Consider opportunities to support schools, community colleges and other educational institutions in their efforts to decarbonize their facilities.

j. Support workforce development and allied suppliers and providers necessary for the massive fuel switching required for decarbonization, for both retrofit and new construction.

4. Accelerate the electrification and transformation of mobility in our community to reduce emissions and provide other benefits such as reduced congestion. (*Mobility*)

a. Work with member agencies and all other relevant stakeholders to develop and implement a strategy and plan for community-wide build-out of EV charging infrastructure; including plan to jointly pursue/leverage external funding opportunities (e.g. BAAQMD, California Energy Commission, PG&E).

b. Develop one or more EV fast charging pilots (e.g. to support EV use in transportation network company operations, to pilot real-time pricing structures, to address "last mile" solutions, and to accelerate adoption of electric autonomous vehicles)

c. Study barriers and pursue activities to support EV use by low-income customers.

d. Study barriers and pursue activities to support EV use for customers living in multi-unit dwellings.

e. Provide support to member agencies and C&I customers in electrifying their vehicle fleets and pursuing other decarbonized mobility solutions (e.g. autonomous electric shuttles as a "last mile" solution, e-bikes, e-scooters).

f. Participate in relevant regional, state and national advocacy groups and coalitions to accelerate transportation electrification.

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5. Educate the community on the benefits of conservation and energy efficiency. (*Energy Efficiency & Grid Integration*)
    a. Promote energy efficiency programs already available to SVCE customers through PG&E and third-party providers.
6. Promote successful grid integration of existing and newly electrified loads to support high penetration renewables integration. (*Energy Efficiency & Grid Integration*)
    a. Include recommendations and/or requirements for connectivity and control in all SVCE programs that result in newly electrified loads.
    b. Develop a program to monetize and harness the value that distributed energy resource (DER) aggregations (aka "virtual power plants") in SVCE service territory can provide the grid and manage the anticipated load growth resulting from electrification.
    c. Explore opportunities to partner with PG&E and other third parties on activities that leverage DERs to provide additional customer and distribution system value.
7. Educate and engage customers and our community in understanding their overall energy usage, opportunities associated with building and vehicle electrification, and specific actions they can take. (*Cross-Sector - Education & Outreach*)
    a. Develop and launch an SVCE-branded customer resource center to enable engagement and awareness-building, education and action related to vehicle and building electrification.
    b. Partner with local organizations in under-represented customer segments to promote SVCE accomplishments and programs.
    c. Develop engaging content for the customer resource center, social media and other channels to broaden interest in energy and electrification.
8. Accelerate innovation needed to achieve SVCE's decarbonization mission. (*Cross-Sector - Innovation*)
    a. Identify key strategic partners and enter into MOUs and other types of partnership agreements to efficiently and effectively engage the innovation ecosystem.
    b. Develop a program with standardized agreements, evaluation criteria, and processes to allow SVCE to rapidly and nimbly identify and pursue promising pilot opportunities with external partners.
    c. Engage with universities, national labs, and other research institutions to support relevant academic research.

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d. Evaluate and implement (or replicate) programs leveraging advancements in fintech and innovative business models (e.g. "as a service", potential leverage of SVCE capital) that remove barriers to accessing needed capital, particularly in low-income and disadvantaged communities.

e. Pursue novel mechanisms to spur innovation, such as aggregating market demand across the service territory and beyond to reduce costs, influence product development and shape the supply chain. (e.g. "golden carrot")

f. Establish an open data portal to provide transparency where appropriate to improve the ability for market actors to support SVCE's missions and spur private sector innovation.

g. Pursue external funding opportunities (e.g. DOE, CEC, BAAQMD) with partners.

9. Leverage data-driven, strategic analyses to inform programs and cross-functional activities. (*Cross-Sector – Other*)

    a. Establish a viable data analytics platform that integrates disparate data sets (customer usage, weather, wholesale market prices, etc.) and enables efficient, high-impact analysis.

    b. Assess technical, economic and market potential of distributed energy resources and electrification across the service territory to inform program development, load forecasting, long-term planning, and rate design.

    c. Carry out a customer segmentation analysis to better understand the diversity and relevant characteristics of the SVCE customer base to inform targeted program activities.

10. Measure and monitor progress toward meeting SVCE's decarbonization goals. (*Cross-Sector – Other*)

    a. Carry out an annual GHG emissions and clean energy asset baseline assessment and update the GHG forecasting and scenario analysis.

    b. Evaluate developing sector-specific objectives or targets (e.g. "25% of new construction all-electric by 2020).

    c. Evaluate how methane leakage should be reflected in SVCE's emissions accounting and decarbonization policies, and propose revised policies, as needed.

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Programs Roadmap

The following programs comprise the programs roadmap, organized by sector and cross-sector initiatives. Initiatives shown in **bold** are prioritized in the first tranche of programs for detailed development and launch in 2019.

Power Supply (PS)

PS1. C&I Clean Power Offerings: Develop, market and sell additional SVCE power offerings to address large C&I customers seeking to buy clean power at competitive rates

PS2. Retail Rates Assessment: Carry out comprehensive assessment of retail rates to develop multi-phase plan for improvements and developments of pilot rates

PS3. Integrated Resource Plan: Develop comprehensive strategy for supply portfolio (e.g. %RPS, short- vs. long-term contracts, local resource carve-out, etc.)

PS4. Local Renewables: Research the availability and price for local resources, and evaluate costs/benefits of procurement

Built Environment (BE)

BE1. Reach Codes: Hire technical consultant to support SVCE and PCE member agencies in the development, review, adoption and implementation of reach codes supporting building electrification and EV charging infrastructure

BE2. All-Electric Showcase Grants: Incentivize near-term development of showcase all-electric commercial and residential building projects, including potential decarbonized district energy

BE3. FutureFit Heat Pump Water Heater: Provide rebates to fuel-switch natural gas water heaters to heat pump electric water heaters (BAAQMD grant)

BE4. Streamlining Community-Wide Electrification: Survey and review local city policies (codes, permitting, inspection, incentives, etc.) and develop model policies/processes

Mobility (MO)

MO1. EV Charging Infrastructure Strategy and Plan: Develop directional strategy(ies), priorities, and action plan with SVCE member communities to guide ongoing build-out of EVSE infrastructure

MO2. EV Fast Charging Pilot Depots: Build pilot high-volume DC Fast Charge facilities to support commercial/public transit fleets, TNC drivers, MUD and DAC residents

MO3. EV Incentives for Low Income: Provide rebates for used EVs for low-income qualified customers in collaboration with Peninsula Clean Energy

MO4. EV Charging for Multi-Unit Dwellings: Provide flexible grant offerings to address market gaps with multi-unit dwelling and small and medium business workplace charging

MO5. Fleet Electrification: Support member cities and commercial customers in evaluating options to electrify their vehicle fleets

Energy Efficiency & Grid Integration (GI)

GI1. Virtual Power Plant: Support "virtual power plants" made up of cloud-based aggregations of customer-sited resources to support grid integration and monetize value from connected, controllable loads

GI2. Non-SVCE Programs: Promote existing, non-SVCE led energy programs through the Customer Resource Center and other channels.

Education & Outreach (EO)

EO1. Customer Resource Center: Develop customer resource center to enable engagement and awareness-building, education and action related to understanding energy usage, vehicle and building electrification

EO2. Community Engagement Grants: Partner with local organizations in under-reached customer segments to promote SVCE accomplishments and programs

Innovation (IN)

IN1. Innovation Partners: Engage with key strategic partners to participate in the local innovation ecosystem to prototype novel program ideas and provide a voice for SVCE customers and the decarbonization mission

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IN2. Innovation Onramp: Provide small grants to support innovation through pilot projects with external partners

Reporting & Review

Updates on Roadmap implementation will be provided on an approximately quarterly basis, coinciding with existing review processes, including the budget cycle and annual strategic plan update.

The Roadmap will be brought forward to stakeholder groups, the Executive Committee, and the Board for a comprehensive review and update on an annual basis, starting in January 2020.

					Building Reach			EV Reach
Member Agency	Status	Next Meeting	Date of Next Meeting	Code Language	Encourage Gas Reduction (1 + 2 + 2A)	Limit Gas (1 + 2A)	Ban Gas (1 only)	Higher than CalGREEN
Mountain View		Approved		Begins on pg. 23			X	X
Morgan Hill		Approved		Begins on pg. 45			X	
Milpitas		Approved		Begins on pg. 1132	X			X
Monte Sereno		Approved		Begins on pg. 3	X[1]			X
Saratoga		Approved		Begins on pg. 33		X		X
Los Gatos		Approved		Begins on pg. 93			X	X
Cupertino		Approved		Ordinance			X	X
Los Altos Hills		Approved		Ordinance		X		X
Campbell		Approved		Begins on pg. 41		X		
Los Altos		1st Reading					X	
Santa Clara County		Staff Proposal			X			
Sunnyvale		Staff Proposal				X		
Gilroy	-	Declined						

[1]Reach code proposes wiring all homes for electric appliances and battery storage

Key

Status

- Approved
- 2nd Reading
- 1st Reading
- Staff Proposal
- Council Briefing

Building Reach

1 - All-electric buildings
2 - Mixed fuel has higher requirements
2A - Mostly electric/electric heating only