



COUNCIL AGENDA: 11/19/2019

ITEM: 7.2

FILE NO: 19-1064

Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Toni J. Taber, CMC
City Clerk

SUBJECT: SEE BELOW

DATE: November 19, 2019

SUBJECT: Climate Smart San José.

RECOMMENDATION:

As recommended by the Transportation and Environment Committee on October 7, 2019, accept the status report on the implementation of the Climate Smart San José Plan, including a response to City Council direction on various Climate Smart activities outlined in the approved May 17, 2019 memorandum from the Mayor and four Councilmembers.

CEQA: Not a Project, File No. PP17-009, Staff Reports, Assessments, Annual Reports, and Informational Memos that involve no approvals of any City action. (Environmental Services)
[Transportation and Environment Committee referral 10/7/19 - Item (d)3]



Memorandum

TO: TRANSPORTATION AND
ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: September 18, 2019

Approved

Date

9-30-19

SUBJECT: CLIMATE SMART SAN JOSE PLAN SEMI-ANNUAL UPDATE

RECOMMENDATION

Accept the status report on the implementation of the Climate Smart San José Plan, including a response to City Council direction on various Climate Smart activities outlined in the approved May 17, 2019 memorandum from the Mayor and four Councilmembers and recommend this item for full Council consideration at the November 19, 2019 City Council meeting.

OUTCOME

Provide a semi-annual update to the City Council on key activities completed and underway to implement Climate Smart San José.

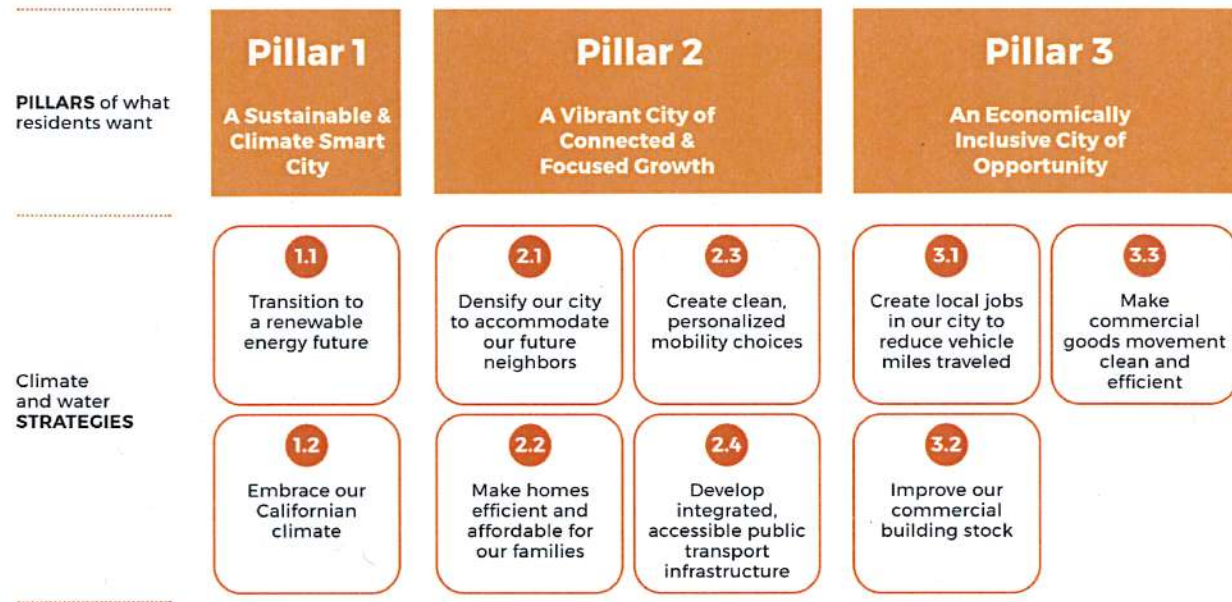
BACKGROUND

The climate challenges of this century directly affect the quality of life of all residents in San José. Over the past two years, across California, the United States, and worldwide, there have been more frequent and disruptive flooding events, degraded air quality from massive wildfires, and record-breaking extreme heat events. San José has been no stranger to such occurrences. Coyote Creek flooded in February 2017, affecting adjacent neighborhoods and causing an estimated \$73 million in property damage to San José homes and businesses, and forcing 14,000 residents to evacuate, some even by boat. Unless action is taken, these events will continue to affect the health of residents and visitors, the safety of neighborhoods, the success of businesses and institutions, and the viability of habitat and wildlife in our community.

In response to the impacts of climate change, the City of San José was one of the first U.S. cities to adopt a Paris Agreement-aligned climate action plan: Climate Smart San José (Climate Smart). Adopted in February 2018, Climate Smart is a data-driven plan with specific goals to

reduce climate change through greenhouse gas (GHG) reduction strategies organized in three pillars with nine associated strategies, as depicted on Figure 1.

Figure 1: Climate Smart San José Framework



A technical working group and executive steering committee, consisting of various City departments under the leadership of the Environmental Services Department (ESD), coordinate the City's climate action efforts. The work group and steering committee meet monthly to develop opportunities for departments to work together, as well as to identify areas that require broad coordination and/or alignment on fundamental policy decisions related to the implementation of Climate Smart.

ANALYSIS

In May 2019, Council directed staff to return to the Transportation and Environment (T&E) Committee with a Climate Smart Community Engagement Plan. A wide range of community interests were brought together in the planning and development of Climate Smart. The engagement and participation of the community in activities that lower greenhouse gas (GHG) emissions is equally critical to the success of the plan – one conducted in collaboration with our community leaders and non-profit partners, and one that clearly articulates pathways to engage hard-to-reach and low-income families. While our work is not yet as robust as we aspire, staff is developing the Community Engagement Strategy in collaboration with 4 key partners:

1. Council Offices
2. Neighborhood and Community-based Organizations

3. Businesses
4. City Staff

Activities to-date in each of these key partner areas is provided below:

Council Offices

Discussions have been held with staff from every Council District to identify the best type of engagement for their constituents, key leaders, community members, neighborhood and faith-based organizations, while also understanding key issues and concerns within their districts. Consistent requests were for specific language materials/speakers and that community outreach be more engaging and interactive, rather than just presentations and question and answer sessions.

Neighborhood and Community-based Organizations

Based on the Council offices' guidance, staff coordinated meetings with Council Districts' Community/ Neighborhood Leadership Councils, identified faith-based organizations, and other key leaders to develop stronger relationships, understand existing actions being taken, identify constraints to action, and build commitment in the implementation of Climate Smart city-wide.

Other key community outreach activities proposed for the near future include: the Bay Area Electrification Expo on building decarbonization in October 2019; Climate Smart and San José Clean Energy's continued engagement activities; the Climate Smart Youth Leaders pilot; a partnership with the Tech Interactive and Work2Future for a climate-focused career/education fair for high school students in March 2020; the Community Climate Solutions web platform and associated Climate Leaders Program for tracking individual contributions to GHG reductions; and, a focused residential engagement project with Mothers Out Front to reach at least 600 households within the City's diverse communities and low and modest-income families.

Businesses

Staff focused its initial engagement with neighborhood and community organizations. Staff will coordinate with businesses and business groups in order to include their input in the Community Engagement Strategy, which is planned to be presented to Council in Spring 2020.

City Staff

Within the City, Departments with a key stake in the implementation and success of the Climate Smart Action Plan are actively coordinating community engagement activities to implement climate change activities in partnership with our community. One example of such coordination is the completion of the Climate Smart Dashboard.

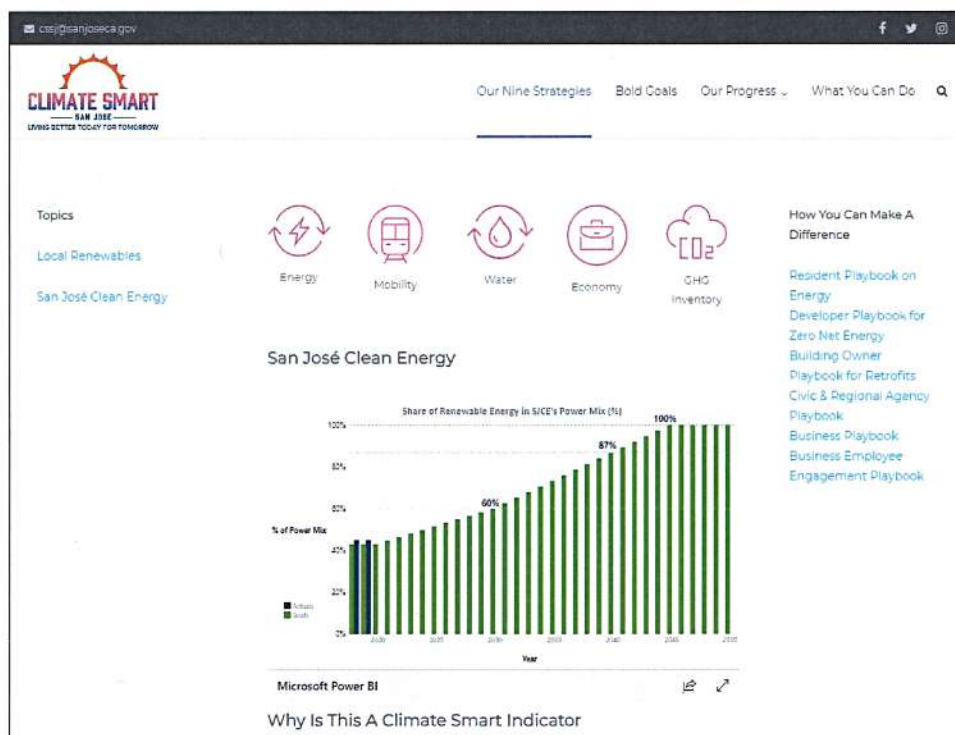
Dashboard

ESD staff has completed its initial work with its external partners and the Climate Smart Technical Working Group to develop and populate an online Climate Smart dashboard in order to track and share progress on GHG emissions and Climate Smart milestones. Staff plans to make the dashboard live online by the end of October 2019.

The Climate Smart dashboard currently presents data on seven metrics: (1) amount of renewable energy capacity installed in San José, (2) share of renewable energy in SJCE's power mix, (3) share of commute trips by walking and bicycling, (4) vehicle miles traveled (VMT) per capita per day, (5) share of commute trips by public transit, (6) residential water use per capita per day, and (7) ratio of jobs to employed residents (J/ER). The dashboard also includes explanations of each metric, plus actions that the City is taking or plans to take to make progress on each metric. More metrics from the Climate Smart plan will be added to the dashboard as it continues to be developed.

The dashboard also includes data on overall City GHG emissions that were inventoried prior to the adoption of Climate Smart in 2018. In order to track the overall trajectory of community-wide GHG emissions, ESD staff worked with International Council for Local Environmental Initiatives (ICLEI) to complete a 2017 GHG inventory, as an update to the most recent 2014 inventory. A comparison of the 2014 and 2017 inventories is on the dashboard, and data from future inventories will be added to the dashboard as they are completed. In addition, the American Cities Climate Challenge (ACCC) has a framework for a dashboard to track the progress of the specific initiatives being supported by the ACCC. The Climate Smart Technical Working Group contributed to the first update of the ACCC dashboard this year, and it may also be adapted in the future to track broader City initiatives. Staff will include a discussion of these tools as part of the next plan update.

Figure 2: Screenshot of the Climate Smart dashboard on the Climate Smart website.



In addition to the above engagement work and dashboard completion, between April 2019 and August 2019, the following notable outreach activities to increase public awareness of taking environmentally Climate Smart actions were completed:

- Community engagement at eight community events and one neighborhood association meeting reaching over a total of 700 residents; selected events included San José Earth Ride and Viva Calle.
- LED giveaway— Staff gave away nearly 1,000 light bulbs at events to promote simple, cost-effective energy efficiency, and the giveaway is an ongoing activity at all Climate Smart outreach events.
- Deployed social media campaigns (in English, Spanish, Vietnamese), including a Climate Smart San José animated video ad on Facebook and Instagram.
- Five outreach events are scheduled in September and October including the Moon Festival (reaching the Vietnamese community) and Pumpkins in the Park. Materials provided will be in English, Spanish, and Vietnamese.
- Staff began implementation of a fall semester long outreach pilot with four high schools in the East Side Union High School District (James Lick, Independence, Piedmont Hills, and Yerba Buena) wherein students lead civic action projects to reduce energy use on campus and become youth leaders of climate change action in their community.
- Staff will launch a Climate Smart Leaders Program, which will focus on increasing resident engagement, activating social networks, and building community capacity around the implementation of Climate Smart, in alignment with the Bay Area Air Quality Management District and ACCC grants. The program will enroll a minimum of 500 San José residents by December 2019, including a sub-goal of at least 50 participants from low-income areas of San José. The program will achieve 0.5-1 ton of CO₂-e emissions reduction per participant on an annual basis, all while promoting Climate Smart actions through utilization of an online platform.

In addition to overarching Climate Smart community engagement, the City made progress on the Climate Smart San José City Action Plans. There is still a long journey ahead in order to implement the full City Action Plan and meet Climate Smart goals through 2050, but there is also a clear, ongoing commitment by the City Council and City staff to make progress in the near-term towards long-term success. The following are key initiatives arranged by the plan's core pillars and are representative of the extensive and commendable actions that various City departments are taking to bring the near- and long-term Climate Smart goals to a reality:

Pillar 1: A Sustainable & Climate Smart City

Transition to a Renewable Future

San José Clean Energy (SJCE) initiated service in September 2018 to municipal accounts and expanded in February 2019 to serve most residents and businesses. SJCE managed by the Community Energy Department (CED) now serves nearly 330,000 customers in the City of San José and is the largest single-jurisdiction Community Choice Energy program in operation. Their peak demand served is approximately one gigawatt (GW). SJCE's default GreenSource service is 45 percent renewable and 80 percent carbon-free, and TotalGreen service is 100 percent renewable. Over 1,000 residential and commercial customers have upgraded to TotalGreen, choosing the cleanest source of electricity possible. Customers opting out of SJCE represent less than two percent of the customers who have been enrolled, an exceptionally low opt-out rate.

CED continues to transition SJCE's overall portfolio mix to carbon-free resources to meet the Climate Smart pillar 1 goals and transition to a renewable energy future. The GreenSource option is on track to be 100 percent carbon neutral by 2021.

One GW Solar City

CED leads the 1 GW Solar City with three parallel initiatives:

1. Promote existing programs available to San José residents
2. Provide education and support to San José residents on home solar systems
3. Develop programs for SJCE customers

Promote Existing Programs

Disadvantaged Community Single-Family Affordable Solar Home (DAC-SASH)

The California Public Utilities Commission (CPUC), following up on the Single Family Affordable Solar Homes (SASH) program, has created and funded a successor program, DAC-SASH, to provide up-front financial incentives for solar installations on homes owned by low income residents in disadvantaged communities (DAC). Non-Profit Grid Alternatives (the program administrator for the SASH program) has been selected as the program administrator for DAC-SASH.

CED has partnered with Grid Alternatives to spur greater use of this program by San José residents. The City will co-market the program with Grid Alternatives. Experience from the SASH program has shown that including a City logo into program mailers has increased the rate of program adoption. Grid Alternatives is expected to send letters to selected San José residents in the Fall of 2019. Additionally, workshops to educate and promote DAC-SASH will be held in Fall 2019.

Bay Area SunShares

In 2008, the U.S. Department of Energy (DOE) named San José as one of 25 Solar America Cities. This grant award was intended to accelerate solar adoption in cities by supporting cities' innovative efforts with financial and technical assistance. As part of this award, ESD staff created an Employee Solar Group Buy program which offered lower solar purchasing costs due to volume purchasing. This successful effort helped to spur other external efforts to organize around group solar buying. A current group buy program, Bay Area SunShares, offers discounts through selected solar providers for residents living in the nine Bay Area counties. SJCE plans to promote the program to customers through social media and SJCE's website.

Education and Support

SJCE Webpage

SJCE's customers have many questions and challenges when considering options for home solar and storage investments. To ease some of these challenges and guide residents through the process, SJCE will launch a solar webpage on SJCE's website. The site will act as an informational hub and resource to support consumer protection and informed decision making. The webpage will include a step-by-step guide aligning with the CPUC's Solar Consumer Protection Guide. It will also include details on available rebates and incentives and a list of answers to frequently asked questions. SJCE is planning to release the website in the fall of 2019.

Programs for SJCE Customers

Net Energy Metering

Subject to Council approval, SJCE plans to complete enrollment of residential Net Energy Metering (NEM) customers who have renewable generation installed at their homes (usually rooftop solar) in 2020. The plan is for customers to be enrolled in several phases throughout 2020 to ease issues related to the true-up of solar generation vs. electricity purchased from the grid. More details on the NEM program will be provided to City Council in the fall of 2019.

Community Solar Program

As part of its suite of programs focusing on expanding solar in DAC's, the CPUC has created two complementary community solar programs for residents in DAC's, the DAC-Green Tariff (DAC-GT) and Community Solar Green Tariff (CS-GT) program. Both programs are CPUC funded and help to provide discounts to low income residents living in DAC's of up to 20 percent. The program's aim is also to provide low income residents who do not own their home and thus do not qualify for the DAC-SASH program to gain access to community solar. The CPUC has provided capacity allocations to Community Choice Aggregator programs, like SJCE, to operate and manage the DAC-GT and CS-GT programs. SJCE is actively investigating both programs and plans to bring a recommendation to Council for a decision on applying to the CPUC for funds for one or both programs in 2020.

SJCE will develop a plan with objectives and key results (OKR's) that provides clarity about focus and progress towards the 1GW goal for consideration by the T&E Committee as part of the next semi-annual Climate Smart update.

Solar Loan Program

Department of Public Works (DPW) is investigating a BAAQMD loan program for storage and solar projects. BAAQMD's Climate Tech Finance program offers subsidized financing for public and private facilities to adopt emerging technologies that reduce GHG emissions.

SolSmart

SolSmart, a U.S. Department of Energy Solar Energy Technologies Office program, recognizes and rewards cities, counties, and small towns for making it faster, easier, and more affordable to go solar. The certification process reviews ease of permitting, public reporting of solar statistics and goals as well as community engagement efforts on solar. The City submitted its SolSmart application and achieved the SolSmart Gold designation. The Gold designation will provide the City with the up to 100 hours of free solar-related technical assistance from a team of providers including the National Renewable Energy Laboratory and the Solar Foundation as well as recognition on their website including basic listings, placement on their map, possibility of a "spotlight" write-up, and additional awards.

Municipal Facilities

Approximately half of the City's outdoor lighting inventory has been converted to energy efficient LEDs in recent years. Voter approval of Measure T (The Disaster Preparedness, Public Safety and Infrastructure Bond) in November 2018 is allowing the Departments of Transportation (DOT) and Public Works (DPW) to implement a complete conversion of the City's remaining outdoor lighting inventory to LEDs. In partnership with PG&E, the City's remaining streetlight inventory of 37,000 lights will be converted by 2021 and the City's remaining 12,000 outdoor park/facility lights will be converted by 2024. LED lighting and controls upgrades will capture additional energy savings and GHG reductions. This will result in energy savings of more than 50 percent upon completion.

DPW continues to implement projects to support renewable energy generation and energy efficiency throughout the municipal portfolio. The City's current solar portfolio spans 39 sites with a total generation capacity of 6.5 megawatts (MW) of clean energy. The last substantial increase to this portfolio occurred in fiscal year 2016-2017, when seven additional municipal sites totaling 1.3MW became operational. The DPW goal to expand municipal solar directly supports the one GW solar goal as well as the Climate Smart San José City action to evaluate solar feasibility for all municipal buildings and install where possible. Additional solar installations can be delivered via capital improvement project improvements and/or through a power purchase agreement (PPA). Capital projects would require one-time and ongoing funding; the City would own the systems, energy savings, and renewable energy credits. In a PPA agreement scenario, the City would essentially transfer these benefits to a third-party company that owns the system in exchange for deferring capital funding costs.

Energy efficiency principals have been incorporated into existing workflows and programs. Heating, ventilation, and air conditioning projects completed at the Shirakawa Community Center and the San José Museum of Art utilized energy efficient equipment to replace inefficient and troublesome end-of-life equipment. This upgrade work will continue through the Deferred Maintenance Infrastructure Backlog (DMIB) program. As projects from the DMIB are funded through individual budget proposals, future replacement work will utilize energy efficient equivalent units.

Design for new City facilities, such as Fire Station No. 37 and No. 20, will incorporate Zero Net Carbon (ZNC) technologies and will be evaluated for battery backup-ready systems to support the City's resiliency goals. The relatively small footprint for these facilities may not lend themselves for the installation of photovoltaic panels to offset their energy consumption; however, the design teams are developing plans to include as much on-site solar panel coverage as possible.

Staff continues to explore technology with vendor entities and research grant and financing opportunities. The BAAQMD loan program provides subsidized financing to facilities adopting emerging technologies to reduce GHG emissions. This Climate Tech Finance program provides a significant learning opportunity to explore these technologies within the City portfolio and incentivize their uptake in the larger commercial market. In addition to pursuing opportunities such as these, a comprehensive strategy and accompanying funding mechanism are needed to implement a holistic program for the entire portfolio as well as traditional efficiency measures. This includes conducting solar feasibility studies, constructing additional systems, retrofitting additional interior and exterior lighting, and additional actions to move the existing municipal portfolio toward ZNC in a significant way.

Climate Smart San José Phase II – Natural and Working Lands (NWL) Analysis

At the February 2018 City Council meeting, Council directed staff to work with external partners to further research the connection between natural and working lands (NWL) and community-wide GHG emissions and report back to City Council with findings and recommendations. City Council subsequently approved up to \$100,000 in matching City funds in FY 2018-2019 to develop this NWL element, and the Santa Clara Valley Open Space Authority (OSA) contributed \$80,000 in matching funds in March 2019. \$20,000 is being utilized for staff costs and \$160,000 was committed for consultant services. A consultant request for proposals (RFP) was posted in April 2019. The RFP was awarded to Cascadia Partners, LLC from Portland, Oregon in July 2019, and the agreement is currently under development with expected execution in September 2019. The final scope of work includes the development of a spatially derived tool (e.g., a modeling platform) and a formal report, which can be incorporated into Climate Smart, that evaluates how NWL land use changes may impact San José's net GHG emissions profile. The tool and final report will be completed within one year of contract execution.

Pillar 2: A Vibrant City of Connected & Focused Growth

Transportation Access and Mobility Plan

Climate Smart San José calls for change to the transportation system and how it is used on a significant scale. Implementing the changes will require the city's approach to transportation to change. To facilitate that change, DOT is working toward a comprehensive San José Access and Mobility Plan. The first phase of the Access and Mobility Plan was completed earlier this year, bringing together the many broad and complex goals, policies, and strategies in the city's guiding documents into eight concentrated directives. The City is hiring a consultant team to lead the next phase of the Access and Mobility Plan, with a focus on projects and programs that enable us to meet our goals and a "decision support system" to allow for ongoing prioritization and evaluation. The Committee and public can find more information on the Access and Mobility Plan in the Transportation Planning Update, also part of the October 7, 2019 meeting.

Shared Micro-Mobility Ordinance

The City of San José adopted a micro-mobility ordinance in December 2018 that permits, monitors, and evaluates shared micro-mobility service operators throughout the city. E-scooters began appearing in San José in February 2018, with multiple companies now operating e-scooter sharing programs on our streets. Today, 5,400 e-scooters are permitted to operate within the City via four companies. In addition, San José already has a robust bike-share program, which is growing from 350 bikes to 2,000, half of which will be e-bikes and will grow the service area from the Greater Downtown area to many neighborhoods throughout the city. These two synergistic programs, e-scooter and bikes (electric and traditional) grouped into the term "shared micro-mobility devices," will result in more climate-friendly options for getting around San José. People have taken approximately three million trips on these services in San José to date, saving the equivalent of nearly 3 million vehicle-miles traveled.

Increasing High Density Housing

The City Council approved the scope of work for the General Plan Four-Year Review in June 2019, which included considering shifting housing growth capacity to the Downtown. The General Plan Four-Year Review Task Force process is anticipated to be completed in spring 2020 with Council consideration of policy recommendations in fall 2020. Additionally, staff is finalizing analysis, a CEQA Addendum, and proposed changes to the North San José Area Development Policy to motivate developers of high-density multifamily housing to construct new affordable apartments in North San José close to transit.

Parking Management and Pricing

The City is reevaluating its car parking policies to improve consistency with its Climate Smart Plan and Envision San José 2040 General Plan transportation and land use goals. At present, minimum parking requirements are based on the type and scale of activity, to ensure sufficient parking. The current parking requirements are not always consistent with community goals, including increasing fairness and housing affordability, reducing traffic congestion and GHG emissions, designing more attractive and lively neighborhoods, and development of urban

villages. In addition, excessive and inflexible parking requirements greatly reduce urban housing and commercial affordability.

Through the American Cities Climate Challenge (ACCC), the city has partnered with Urban Land Institute (ULI), and Nelson Nygaard to comprehensively evaluate and update parking requirements for new development to enable no- and low-parking development, particularly in the downtown and other areas around transit. The process will engage technical experts in parking policy to help develop broad project objectives and provide guidance on this complex issue. The parking strategy will evaluate on-street and off-street parking pricing, where to remove or reduce minimum parking requirements, whether to impose maximum parking requirements in the downtown area and near high-capacity transit stations, and/or how to effectively “unbundle” the cost of parking from the cost of renting/leasing/owning usable residential or commercial space. Expected end products will include updated parking policies and updated zoning code regulations that will modernize parking requirements to accelerate the adoption of multimodal solutions. Initial research on parking policy case studies is being undertaken by ULI and Nelson Nygaard and is expected to be completed in fall 2019.

The parking strategy will benefit from a broad range of community and stakeholder input. City staff is currently working with ULI on a Technical Assistance Panel (TAP) to focus on citywide parking requirements. The TAP process is a service offered by ULI to local governments facing complex land use issues. As part of the process ULI will convene a panel of experts to offer objective guidance on policy questions related to the parking management and pricing initiative. The TAP is anticipated to convene in early 2020. Staff is also reaching out to a number of other non-governmental organizations and community groups to assist in creating a robust public outreach process for the parking management program.

Urban Sustainability Director's Network's (USDN) Equity Leaders Program

As the beginning of an effort to apply an equity lens to Climate Smart initiatives, ESD led an interdepartmental team from ESD, DOT, SJCE, Housing, and the Mayor's Office through the Urban Sustainability Director's Network's (USDN) Equity Leaders Program. The team completed six workshops, focused on equity-based tools and techniques, and applied learnings to team worksheets. The final associated team activities will be completed prior to the USDN's Annual Equity Workshop in October 2019, which the Climate Smart Deputy Director will attend, in order to qualify the City to apply for equity mini-grants and an equity fellow in 2020.

Electric Mobility Roadmap

The City of San José has developed a draft Electric Mobility Roadmap (see Attachment A). As part of this effort, DOT contracted with the Shared-Use Mobility Center (SUMC), a non-profit, public interest organization, to analyze the current state of electric vehicle and infrastructure uptake, identify infrastructure gaps, and highlight priority areas for the installation of additional electric vehicle chargers to expand the market for electric vehicles and electric-shared mobility services. The City of San José is also receiving support through the ACCC to develop an electric vehicle (EV) education program with partners for the public and auto

dealerships and a e-shared mobility pilot program. These initiatives, as well as other strategies the City could consider to advance its goals, are described in the draft Electric Mobility Roadmap. Staff will bring the Electric Mobility Roadmap to City Council for consideration of adoption in January 2020.

EV Charge Points

DPW and DOT have been working with PG&E to install 172 charge points for EVs through the company's Electric Vehicle Charging Network program. The program pays for all of the costs associated with upgrading the electrical system to power the chargers and a portion of the cost to purchase the chargers. The chargers will be installed at five City facilities: Happy Hollow Park and Zoo, Camden Community Center, Central Service Yard, San José -Santa Clara Regional Wastewater Facility, and the 5th Street/employee garage. They would be available for use by the City's fleet, its employees and in most cases the public. Construction is estimated to begin in early 2020. Electrify America, a subsidiary of Volkswagen, has or is in the process of installing 17 electric vehicle chargers at five locations in the City. All of the sites include three DC fast chargers. Two installations also included a Level 2 charger. The installations are a result of Volkswagen 2016 diesel emissions settlement agreement with the State of California. As part of that settlement, Volkswagen agreed to invest \$800 million over 10 years to support EV adoption in California. The San José metro area was chosen by the company as one of a handful of metropolitan areas where it planned to focus its investment in the first five years of the program. The City anticipates more chargers will be installed by Electrify America in San José in the next two years. Details on those projects have not yet been made public.

Zero Net Carbon Demonstration Project

Construction was completed on the ZNC building demonstration project (ZNC demo), also known as "Carbon Free Living," in April 2019. The ZNC demo is a mobile 18 feet by 8 feet trailer that features 17 ZNC and energy efficient technologies. The ZNC demo had a soft launch in May 2019 and was hosted at three City events with approximately 162 residents engaged at those events. Staff also finalized a contract with San Jose Conservation Corp, which built the demo, to haul and set up the demo at up to seven additional community events in 2019. An augmented reality (AR) component will be added to the ZNC demo for residents to better understand the energy and carbon savings associated with upgrading to the technologies featured in the ZNC demo. The AR application will allow residents to use a smartphone application that superimposes trivia questions, images, videos, and other computer-generated objects onto the technologies featured in the ZNC demo. For events that cannot physically accommodate the ZNC demo, a virtual reality app (VR) will be created for users to explore a virtual ZNC home with a similar user experience as the AR component. The VR application will be accessible to anyone with a VR headset. Staff is developing the AR and VR applications with an expected completion date of October 2019.

Heat Pump Water Heater Rebate Program

Electrify San José (www.sjenvironment.org/electrifysanjose), a residential heat pump water heater rebate program, was launched on July 1, 2019. The program provides rebates of up to \$4,500 to households who upgrade from a natural gas water heater to an electric heat pump water heater. Low income households currently enrolled in the California Alternate Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) programs are eligible for additional rebate amounts of up to \$6,000. Approximately 65 projects will be rebated on a first-come, first-serve basis through September 2020 with funding available from the BAAQMD Climate Protection Grant. To promote Electrify San José, City staff will send trilingual notices to 5,000 randomly selected CARE and FERA households and host three energy trainings for homeowners and renters through December 2019. City staff has coordinated with Silicon Valley Clean Energy, another BAAQMD Climate Protection Grant winner serving the rest of Santa Clara County, to align rebate amounts and messaging to residents and contractors.

Induction Cooktop Checkout Program

In July 2019, City staff also launched an induction cooktop checkout program. San José residents can check out a portable induction cooktop and cookware for free for up to two weeks. The goal of the program is to encourage residents to switch from a natural gas cooktop to an electric induction cooktop. In addition to reducing greenhouse gas emissions, induction cooktops improve indoor air quality by removing a source of nitrogen oxide and carbon monoxide. Residents can sign up to reserve a cooktop and cookware at www.sjenvironment.org/inductioncooking.

ZNC Educational Video

City staff completed an informational video (www.sjenvironment.org/zncbuildings) that explains ZNC building components and benefits to the community. This tool was integrated into other energy efficiency, electrification, and carbon-free energy programming, including the Bay Area Home Electrification Expo invitation and Climate Smart Youth Leaders pilot. An editable version was also shared with over 100 local jurisdictions and partners for them to insert their own logo and URL and distribute to their community under their own brand.

Energy Trainings

Between November 2018 and August 2019, City staff hosted 17 no-cost energy trainings to 420 attendees. Energy trainings are geared towards key audiences including building professionals, real estate professionals, homeowners, renters, and PBCE staff. These trainings are intended to educate the public on effective energy conservation strategies, increase market demand for cutting-edge energy efficiency technologies, and improve awareness of local and state energy policies which impact local building requirements and building operations.

Between September 2019 and December 2019, staff will host 7 additional trainings. On October 12, 2019, the City will host the first "Bay Area Home Electrification Expo" at the Tech Interactive (formerly the Tech Museum). This all-day event will include four trainings and a resource fair with technology manufacturers, contractors, and program representatives to

educate residents and building professionals on building electrification and ZNC buildings. A list of all upcoming trainings is available at www.sjenvironment.org/energytrainings.

Pillar 3: An Economically Inclusive City of Opportunity

Building Energy & Water Performance Ordinance

On December 11, 2018, San José City Council approved the Energy and Water Building Performance Ordinance (BPO). This ordinance requires large commercial and multifamily buildings 20,000 square feet (sq. ft.) and above to track and benchmark their energy and water use with the U.S. Environmental Protection Agency's ENERGY STAR Portfolio Manager® (ESPM) platform and report this data to the City of San José on an annual basis. The first reporting deadline was May 1, 2019 for buildings 50,000 sq. ft. and larger. The first reporting deadline for buildings 20,000 sq. ft. and above will be May 1, 2020. The City will make a subset of reported data publicly available. On a rolling five-year cycle, starting in 2021, buildings will also have to complete one of the two "Beyond Benchmarking Pathways" through which they will have to either 1) demonstrate high performance or performance improvement; or 2) complete an audit, building re-tuning, or targeted efficiency actions with the goal of improving their performance.

As of the first reporting deadline, May 1, 2019, 360 benchmarking reports have been received. ESD continues to accept reports on a rolling basis and to review received reports for data quality. As of August 15, ESD received 645 reports in total and 451 buildings are considered as "in compliance" with the ordinance. An overall compliance rate cannot be determined at this time, due to discrepancies in the original property data used to compile the covered buildings list. Staff are working to reconcile data quality issues and resolve data gaps in the covered buildings list.

Moving forward, ESD will be implementing a benchmarking report submission fee to fund program implementation; starting in FY 2019-2020, this fee will be set at \$150 and will be adjusted annually based on program cost recovery.

ESD is also developing a Commercial Climate Leaders Challenge, in conjunction with ACCC commitments, which will run from October 2019 through October 2020. The goal of the Challenge is to provide direct assistance to buildings impacted by the BPO, in order to help them reduce their energy and water consumption in advance of the Beyond Benchmarking Pathway requirements, although properties not affected by the BPO will be welcome to join, too. Active participants will be given access to various educational opportunities, technical support, and will be recognized for their actions through a variety of communications outlets (case studies, social media shout-outs, etc.).

Reach Code Ordinance

Climate Smart San José establishes a goal that by 2020, 100 percent of new homes will be zero net energy/carbon (ZNE/ZNC). As defined in Climate Smart, a ZNE/ZNC building is one that has zero net carbon emissions, meaning that it would need to be all-electric with a clean energy

source, i.e., via the grid and/or on-site renewable energy. In order to achieve the Climate Smart goal, homes built in San José will need to be designed to exceed, via a “reach code”, the green building measures specified in the 2019 California Energy Code’s Building Energy Efficiency Standards (Title 24, Part 6) (to be implemented in 2020).

In order to inform and get feedback from the community on the City’s reach code initiative, from May through August 2019 City staff, working with the New Buildings Institute, completed the following: created a Reach Code webpage; reached out to over 65 stakeholders and more than 200 Neighborhood Associations; held four stakeholder engagement workshops, completed four additional public presentations; and, participated in several individual meetings, as requested, with organizations representing the affordable housing and market-rate development community. Staff also coordinated with several City departments, as well as representatives from several cities throughout California. On September 17, 2019, City Council adopted the reach code, which will be effective January 1, 2020.

Resources and Performance Tracking

Staffing Focused on Climate Smart Implementation

San José was the first ACCC awardee to hire its Climate Advisor, housed in ESD, who will help to facilitate Climate Smart ACCC initiatives to completion during the ACCC grant term. As part of the 2018-2019 Mid-Year Budget Review approved by Council on February 12, 2019, a new City-wide appropriation of \$150,000 was established to provide temporary analytical and planning staff support for ACCC initiatives within ESD, DOT, and PBCE. Recruitment efforts are underway to fill these key staff positions, with PBCE having successfully filled its position in April 2019. City staffing support will be critical to fully leverage the resources and expertise being offered by Bloomberg Philanthropies through the ACCC program. Additional limit-dated positions will be considered as part of the 2019-2020 Proposed Budget development to continue work efforts until the end of the ACCC project (December 2020).

Funding

While focusing on the delivery of quality work products under current grants, City staff continue to closely track and discuss, as part of the Climate Smart technical working group meetings, available grant opportunities to ensure coordinated and timely grant applications. Recently, DOT was awarded a \$10 million grant for the Better Bikeway SJ project and is awaiting a response, expected in Spring 2019, to its \$680,000 Caltrans Sustainable Communities Grant application for an Emerging Mobility Action Plan.

For Climate Smart ACCC initiatives, ESD staff is working with ACCC staff to pursue the furthest extent of in-kind resources such as communications and strategic planning assistance and consultant services. The Silicon Valley Energy Watch grant will be extended through June of 2020 with an additional \$196,000 provided to the City to support Climate Smart initiatives.

In August 2019, the California Energy Commission (CEC) announced funding for electric vehicle charging infrastructure incentives to be directed towards Santa Clara and San Mateo counties as part of a CALeVIP (California Electric Vehicle Infrastructure Project). San José Clean Energy had partnered with regional CCA's and Municipal-owned Utilities to apply for CALeVIP funds for Santa Clara and San Mateo counties. The CEC will be investing \$10 million towards incentives in San José to be used to cover some of the costs for Level 2 charger and DCFC installations. San José Clean Energy has also pledged \$4 million (subject to Council approval) to the project, leading to a total budget of \$14 million to be used for incentives in San José. The project is expected to be launched in May 2020 with implementation and fund disbursement continuing through June 2022.

Council Memo Section

The new Council Memo section is currently in the approval process and should be included in Council Memos by October 2019.

EVALUATION AND FOLLOW-UP

Staff will provide progress updates to T&E and City Council on Climate Smart San José activities on a semi-annual basis.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the October 7, 2019 T&E agenda as well on the November 19, 2019 City Council's Agenda website.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office, the Department of Transportation, Community Energy Department, Housing Department, Public Works and Planning, Building and Code Enforcement.

COMMISSION RECOMMENDATION/INPUT

No commission recommendation or input is associated with this action.

FISCAL/POLICY ALIGNMENT

Climate Smart San José activities align with the Climate Smart San José strategies and the City's Envision 2040 General Plan approved by City Council.

CEQA

Not a project, File NO. PP17-003, Agreements/Contracts (New or Amended), resulting in no physical changes to the environment.

/s/
KERRIE ROMANOW
Director, Environmental Services

For questions, please contact Kerrie Romanow, Environmental Services Director, at (408) 535-8552.

Attachment A: Draft Electric Mobility Roadmap