



COUNCIL AGENDA: 11/08/21
FILE: 21-2415
ITEM: 6.1

Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: November 1, 2021

Approved

Date

11/03/21

SUBJECT: CLIMATE SMART SAN JOSE AND CARBON NEUTRAL RESOLUTION

RECOMMENDATION

Approve the *Carbon Neutral San José by 2030 Resolution* to set a goal of carbon neutrality for San José by 2030.

OUTCOME

City Council approval of the recommendation will establish the City's aspiration to be carbon neutral by 2030 and accelerate community-wide progress on meeting the goals of Climate Smart San José.

BACKGROUND

The impacts of climate change directly affect the quality of life of all residents in San José and have a disproportionate impact on disadvantaged residents. San José has already begun to experience these impacts – suffering through disruptive flooding events, degraded air quality from massive wildfires, and record-breaking extreme heat events in the last few years.

In February 2018, City Council approved Climate Smart San José, one of the first climate action plans in the U.S. setting targets for greenhouse gas (GHG) emissions reductions in line with the goals of the Paris Climate Agreement. Climate Smart focuses on three targeted climate action areas - mobility, energy, water – and the associated quality of life co-benefits. The Climate Smart plan includes indicators, metrics, and progress milestones for 2030, 2040, and 2050, which are all tracked on the publicly accessible Climate Smart Data Dashboard. The City's *Envision San José 2040 General Plan* is an essential building block for the Climate Smart plan. As such, City staff plans to update Climate Smart following the four-year review cycle of the General Plan. In 2019, City Council approved a Resolution declaring a climate emergency to recommit the City to be a leader in climate action.

In May 2019, the City executed a Memorandum of Understanding with the Natural Resources Defense Council, Inc., the lead Climate Challenge grant technical partner. The Climate Challenge grant is a Bloomberg Philanthropies initiative which provides technical assistance and capacity to support several Climate Smart-aligned Climate Challenge initiatives around energy efficiency, electric vehicles, low-emission mobility options, a building reach code, and building electrification. The Climate Challenge grant is estimated to provide over \$2.5M in staffing, direct consultant services, and technical support through its planned June 2022 term ending date. This support includes a contracted Climate Advisor who is housed within the City's Environmental Services Department and facilitates the completion of Climate Challenge initiatives.

The City conducted community-wide GHG inventories in 2008 and 2014 as part of its General Plan update process. Starting in 2018, the City began conducting community-wide GHG inventories every other year, with the City's most recent community-wide GHG inventory conducted in 2020 and covering 2019 data.

In 2018, California set a carbon neutral by 2045 goal. In July 2021, Governor Newsom directed California state agencies to accelerate California's progress to its climate goals with a new 2035 carbon neutral goal. With this direction, the California Air Resources Board and California Public Utilities Commission will evaluate pathways for the state to achieve carbon neutrality by the new 2035 goal date.

Every six to seven years, the IPCC prepares Assessment Reports about the current knowledge on climate change, including its causes, potential impacts, and response options. In August 2021, the IPCC released its first report – *Climate Change 2021: the Physical Science Basis* - from its Sixth Assessment Report cycle, which will be completed in 2022. The report is a compilation of years of peer-reviewed scientific studies with over 200 authors from over 60 countries and is considered to be the most comprehensive assessment of climate science to date.

ANALYSIS

The Urgency of Climate Change

The August 2021 IPCC report included findings that:

- The climate has already warmed by 1.1 degrees Celsius (about 2 degrees Fahrenheit), which is the hottest Earth has been in 100,000 years;
- We are set to pass 1.5°C warming by 2040;
- Humans are the cause of this temperature rise, which is mostly driven by our burning of fossil fuels; and
- We are close to irreversible tipping points.

According to the IPCC Vice-Chair Ko Barrett, "This report tells us that recent changes in the climate are widespread, rapid and intensifying, unprecedented in thousands of years." The report

is a dire warning and reminder that we must take bold and decisive action to reduce GHG emissions and mitigate climate change. Per the report, “strong and sustained reductions in emissions of carbon dioxide (CO₂) and other greenhouse gases would limit climate change”.

The Role of Cities

Cities play a key role in the fight against climate change. The Climate Challenge has demonstrated cities’ unique ability to deepen and accelerate efforts to tackle climate change and promote a more sustainable future for residents. According to a new *Climate Challenge Impact Report*, with the Climate Challenge support and taking into account all climate efforts, the Climate Challenge cities are expected to collectively reduce emissions 32 percent below 2005 levels by 2025, surpassing Paris Agreement goals.

As the 10th largest city in the U.S. and home of a diverse population, with large Latina/o/x and Vietnamese communities, San José should play a leadership role in pressing for urgent action to curb the worst impacts of climate change, particularly in a way that puts frontline communities who will be most impacted by climate change as a central focus.

Our Accomplishments and Current Initiatives

San José has approved and implemented many notable Climate Smart initiatives including:

- Implementation of San José Clean Energy citywide (2019)
- Adoption of a Building Reach Code (2019; at the time of its passage, San José’s Reach Code was considered the most ambitious reach code in the U.S.)
- Adoption of a Natural Gas Infrastructure Prohibition Ordinance for low-rise residential new construction (2019)
- Implementation of the Building Performance Leaders Challenge (2019-2020), achieving a 25 percent reduction in GHG emissions in participating buildings
- Adoption of an updated Natural Gas Infrastructure Prohibition Ordinance for all new construction with limited exemptions (2020)
- Implementation of the Electrify San José heat pump water heater rebate program (July 2019-June 2021)
- Adoption of the Better Bike Plan 2025 (2020)
- Adoption of an Electric Mobility Roadmap (2020) to accelerate electric transportation in San José
- Installation of 53 miles of bike lanes across the City, including 12 miles of all-ages and -abilities bikeways (2019-2020)
- Installation of over 2,000 new publicly accessible EV charging stations (January 2019-June 2021)
- Launch of the Drive Forward EV Financial Assistance Program (2020), with five EV education workshops serving 200 low-income residents as well as EV discount programs
- Adoption of a One Way Vehicle Sharing Ordinance (2021)

- Adoption of the Water Shortage Contingency Plan (2021)
- Pilot of Advanced Metering Infrastructure technologies for the San José Municipal Water System and San Jose Water Company Service Areas (2021)
- Pilot of bioretention solution to improve recycled water quality and expand recycled water usage applications (2021)
- Adoption of Integrated Water Infrastructure Program Plan (2020)

In the most recent community-wide GHG inventory for San José, covering calendar year 2019, emissions totaled 5.4 million metric tons of CO₂ equivalent. Most of San José's emissions came from transportation (51 percent) and buildings (34 percent). Most of the transportation emissions (88 percent) came from on-road vehicles. Building emissions were mainly from natural gas (56 percent) and electricity (41 percent). San José's community-wide emissions have steadily decreased since 2008 (the earliest year that the City has data), even as the city's population has increased. The 2019 community-wide GHG inventory for San José showed a 5 percent reduction in total emissions from 2017 to 2019 and a 28 percent reduction from 2008 to 2019.

San José's Climate Smart efforts have been recognized, its awards and accolades include:

- Carbon Disclosure Project "A List" (2020),
- American Council for an Energy Efficient Economy City Scorecard top ten (2020),
- Shining Cities top ten for both solar installed and installations per capita (2020),
- *SPUR Impact Award* to the Building Reach Code development team (2020),
- Big U.S. city with best EV charging infrastructure (Rocky Mountain Institute, 2020), and
- 10th Greenest City in America (WalletHub, 2021).

San José continues to push forward with innovative and impactful Climate Smart initiatives (see Attachment A, *Overview of Current Climate Smart Initiatives*). With its bold vision, accomplishments, and initiatives in place, the City has succeeded in acquiring over \$4.5M in external funding and resources to-date to support the City's Climate Smart efforts.

Engaging Our Community

During the development and implementation of Climate Smart initiatives, City staff is employing leading-edge community engagement tactics to align with the community's priorities and integrate equity considerations, including:

- Working closely with local community-based organizations (CBOs) that represent historically marginalized communities to develop the key focus areas of plan development based on community priorities,
- Conducting targeted stakeholder engagement with specific groups, including labor organizations, affordable housing developers, and CBOs that serve historically marginalized and low-income communities to better understand key issues and opportunities, and

- Compensating CBOs for their staff time providing input and review during the plan development process.

In fall 2019, the City launched the Climate Smart Challenge, a San José-customized web platform translated in Spanish and Vietnamese that guides residents through over 60 potential actions they can take to lower their carbon footprint. Participants can work in teams and/or community groups and share tips and progress through a social engagement feature. The Climate Smart Challenge platform currently has nearly 700 participants who have reduced 250 tons of CO₂ emissions – equivalent to the emissions from approximately 50 cars in one year. City staff will be launching a pilot community engagement campaign in 2022, building from previous engagement and community partnerships, to increase the number of participants and accelerate climate action.

Our Aspiration and Leadership

Climate Challenge support allowed the City to significantly accelerate its progress toward completing targeted climate actions. However, this support will sunset in June 2022 while taking action to mitigate climate change – which is also deeply connected with public health and social justice – remains an urgent necessity.

At this critical juncture, the City can acknowledge the urgency of climate change and step up its commitment to being a climate leader by approving a Resolution setting its aspirations at being carbon neutral by 2030. A “carbon neutral city” is defined by C40, an international network of cities committed to addressing climate change, as a city that has achieved and demonstrated, in a given year, that it has met net-zero GHG emissions from, at minimum, all the following: 1) fuel use in buildings, transport, and industry, 2) use of grid-supplied energy, and 3) treatment of waste generated within the city boundary. By setting this goal, the City and community can be inspired to think and act big in the fight against climate change, better align with State climate neutrality direction, and attract funding to accelerate the momentum behind its actions to mitigate climate change. If the Resolution is approved, San José would be the largest city in the U.S. to set a carbon neutral by 2030 goal; however, it would not be alone. Other U.S. cities, including Irvine, Menlo Park, Petaluma, Ann Arbor (Michigan), Flagstaff (Arizona), Ithaca (New York), and Park City (Utah), and several leading companies, including Apple, Microsoft, IBM, LG, Siemens, General Electric, and Google, have also made this commitment.

With the first Climate Smart update planned for FY 2022-2023, City staff would like to, at minimum:

- formally incorporate the new Climate Smart Natural and Working Lands and Zero Waste elements, two areas identified in the Climate Smart plan as requiring further City study so that they could be incorporated into the City’s climate strategies (see Attachment A for project details);
- update the Climate Smart model and metrics; and
- incorporate any new carbon reduction goals, as well as anticipated actions and costs – including the cost of doing nothing.

In recent years, Climate Smart San José Plan Implementation has been primarily funded through a combination of various grant sources as well as one-time General Fund resources. For 2022-2023, funding levels and sources – including the continued leverage of grants – will be evaluated as part of the upcoming budget process, and is expected to consider the following:

- Bringing staffing and consultant support to, at minimum, current Climate Challenge support levels (i.e., 1.0 FTE supervisor-level staff, consultant services, and community engagement support);
- Funding a community engagement campaign utilizing the City’s existing Climate Smart Challenge online platform and catalyzing climate action;
- Further incorporating equity into the Climate Smart plan and conducting community engagement for further input on the Climate Smart update; and
- Developing a climate resiliency and adaptation plan for San José.

CONCLUSION

San José has much to be proud of in terms of its past achievements and current efforts to address climate change. The Climate Challenge grant has helped to accelerate the City’s momentum on meaningful climate action. However, this support is ramping down and will close out by June 2022. The latest IPCC Report indicates that climate change is “widespread, rapid, and intensifying”. Therefore, the City is at a critical juncture in its climate action commitment and efforts. City staff recommends that City Council adopt a *Carbon Neutral San José by 2030 Resolution* in order to acknowledge the urgency of climate change and demonstrate the City’s continued commitment to taking bold climate action. By setting this ambitious goal for San José, the City can inspire our and other communities throughout the world, keep up our momentum in addressing climate change, better align with State climate neutrality direction, and attract funding to accelerate the City’s Climate Smart initiatives.

EVALUATION AND FOLLOW-UP

Staff will provide progress updates to the Transportation and Environment Committee and City Council on Climate Smart San José activities on a semi-annual basis.

CLIMATE SMART SAN JOSE

The recommendation in this memo aligns with all the Climate Smart San José energy, water, or mobility goals.

HONORABLE MAYOR AND CITY COUNCIL

November 1, 2021

Subject: Climate Smart San José and Carbon Neutral Resolution

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PUBLIC OUTREACH

This memorandum will be posted on the City's website for the November 8, 2021 City Council's Agenda website.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office, City Manager's Budget Office, Departments of Community Energy, Economic Development and Cultural Affairs, Planning, Building and Code Enforcement, and Transportation.

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

Determination of Consistency with the Envision San José 2040 General Plan EIR, Supplemental EIR, and Addenda thereto, File No. PP18-009.

/s/

KERRIE ROMANOW
Director, Environmental Services

For questions, please contact Julie Benabente, Deputy Director, at (408) 975-2537.

Attachment A: *Overview of Current Climate Smart Initiatives*

Attachment A: Overview of Current Climate Smart Initiatives¹

Project Title²	Project Description	Est. City Council Date for Consideration of Approval	Lead Department
Parking and Transportation Demand Management Policy*	Following the Council Study session on this policy, the team is currently focused on community engagement efforts, supplemental analysis, and developing a transportation analysis handbook. If approved by Council, this policy will remove parking minimum requirements citywide and implement transportation demand management requirements to expand transportation options in and near new development.	Q1 2022	Department of Transportation (DOT)
Access & Mobility Plan	The San José Access & Mobility Plan will lay out a set of strategies to bring the bold transportation goals of Envision 2040 San José General Plan and Climate Smart San José to life. The Access & Mobility Plan is developing projects and policies that make progress on goals like increased walking, biking, and transit use, decreased auto dependence, increased safety, and making our streets designed around people, not cars.	Q1 2022	DOT
Delivering Zero Emissions Communities (DZEC) Initiatives	The work under the DZEC grant, awarded in June 2021, will include the analysis of commercial freight GHG emissions data, working with an Equity Task Force to prioritize actions to reduce freight emissions, and hosting an Urban Freight Working Group to identify a GHG emissions reduction commitment(s) from commercial freight companies.	N/A	DOT

¹ City staff provides biannual Climate Smart updates covering initiatives across departments to City Council. In addition, DOT provides in-depth transportation updates in December and June each year.

² “*” Denotes an American Cities Climate Challenge initiative.

Project Title	Project Description	Est. City Council Date for Consideration of Approval	Lead Department
Energy Efficiency Programs	San José Clean Energy (SJCE) secured \$5.1 million from the California Public Utilities Commission (CPUC) to offer two energy efficiency programs over three years, beginning winter 2022. The first program offers discounts on energy efficient electric appliances, including refrigerators, clothes washers, dryers, and dishwashers, to moderate-income single-family households as well as single-family households located in disadvantaged communities. The second program will incentivize energy-efficient upgrades to heating, ventilation, and air conditioning (HVAC), refrigeration, and hot water distribution systems for small commercial buildings, including schools. SJCE aims to serve 250 residential customers, 100 businesses, and three schools annually. The City allocated \$500,000 in federal relief funds to expand access to the residential program over the next two years.	N/A	Community Energy Department (CED)
Solar Access (Disadvantaged Communities-Green Tariff Program)	Solar Access offers low-income customers living in disadvantaged communities a 20 percent bill discount and 100 percent solar energy from a solar facility in Northern California. Customers can receive the discount if they meet the eligibility requirements. The program is entirely funded by the CPUC. SJCE is currently accepting applications for the program and will proceed with customer enrollment after November 5, 2021. There are approximately 600 spots in the program.	N/A	CED
Integrated Resource Plan	In mid-2022, SJCE will submit an Integrated Resource Plan to the California Public Utilities Commission. It is a long-term utility plan to ensure SJCE procures energy resources to meet load needs and achieve climate goals. SJCE is currently working with a consultant to undertake the analysis and will begin customer engagement in spring 2022.	N/A	CED

Project Title	Project Description	Est. City Council Date for Consideration of Approval	Lead Department
Existing Building Electrification Plan*	This plan to equitably electrify existing buildings in San José will contain a series of recommendations including policy and program options centered around four key areas: workforce development and job opportunities, housing and energy costs, energy reliability, and health and air quality.	Q2 2022	Environmental Services Department (ESD)
Zero Emissions Neighborhood (ZEN) Pilot*	Climate Smart has been developing the ZEN pilot concept with the support of the Climate Challenge. The ZEN pilot is intended to bring a suite of Climate Smart building, mobility, and water improvements to households in a pilot neighborhood. The neighborhood will be selected based on equity data indicators, input from local community-based organizations, and interest from residents. The ZEN pilot design will be co-created with the participating households and is expected to be completed in mid-2022.	N/A	ESD
Advanced Metering Infrastructure (AMI) Deployment	AMI will allow residents and commercial businesses to view water usage data in nearly real-time, increasing potable water usage awareness and leak detection efficiency. San José Municipal Water will complete a pilot of three technologies in Q1 2022 and develop a full implementation plan to deploy AMI to more than 26,000 service connections. San Jose Water Company, which services approximately 80 percent of the city, will conduct a phased AMI deployment during the next few years.	N/A	ESD
Integrated Water Infrastructure Program (IWIP)	Increasing recycled water use is a goal within Climate Smart San José. The objective of the IWIP is to integrate existing water infrastructure to create a cohesive distribution system conveying stormwater, non-potable groundwater, and recycled water to maximize underutilized assets and increase the non-potable water supply. South Bay Water Recycling and San José Municipal Water will complete an expanded pilot project in 2022 to assess the efficacy of bioretention ponds to expand recycled water applications by improving recycled water quality and to diversify San José's water resources portfolio.	N/A	ESD

Project Title	Project Description	Est. City Council Date for Consideration of Approval	Lead Department
Water Efficient Landscaping Ordinance Update	The objective of the Ordinance update will be to replace high-water-consuming with drought-tolerant landscaping and to reduce impermeable surface area citywide.	Q1 2022	ESD
New Climate Smart Natural and Working Lands (NWL) Element	In a partnership with and with matching funding from the Santa Clara Valley Open Space Authority (OSA), the City finalized its NWL Technical Report in September 2021. The Report evaluates how various NWL land use changes and enhancements, such as land preservation and restoration, urban forestry, and carbon farming, can reduce San José's net GHG emissions and provide co-benefits. City staff are currently working with the NWL consultant, OSA, and other internal and technical stakeholders to draft the NWL Element. The NWL Element will lay out the new NWL indicators, metrics, and progress milestones for City Council consideration to incorporate into the Climate Smart plan.	Q2 2022	ESD
New Climate Smart Zero Waste Element (ZWE)	The ZWE will account for the City's net greenhouse gas emissions resulting from the solid waste sector. It will assess and reevaluate the prioritization of the City's zero waste strategies and address related critical issues regarding recycling markets, changing waste regulations, domestic reuse potential, local infrastructure related to waste, and landfill capacity. An update will be provided to T&E on February 7, 2022, as part of the Status Report on Solid Waste Programs and Recycle Right Public Outreach Program.	TBD	ESD