

Special Meeting September 27, 2022

The City Council of the City of Palo Alto met on this date in the Council Chambers and by virtual teleconference at 5:00 P.M.

Present in person: Burt, Cormack, DuBois, Filseth, Stone, Tanaka

Present Virtually:

Absent: Kou

#### Closed Session

1. CONFERENCE WITH LABOR NEGOTIATORS City Designated Representatives: City Manager and his Designees Pursuant to Merit System Rules and Regulations (Ed Shikada, Kiely Nose, Sandra Blanch, Nicholas Raisch, Tori Anthony, Molly Stump, and Terence Howzell) Employee Organization: Service Employees International Union, (SEIU) Local 521, Utilities Management and Professional Association of Palo Alto (UMPAPA)Palo Alto Peace Officers' Association (PAPOA), Palo Alto Police Management Association (PMA), International Association of Fire Fighters (IAFF) local 1319, Palo Alto Fire Chiefs Association (FCA), Management and Professional Employees (MGMT); Authority: Government Code Section 54957.6 (a)

**MOTION:** Council Member Cormack moved, seconded by Mayor Burt to go into Closed Session.

**MOTION PASSED:** 7-0

Council went into Closed Session at 5:03 P.M.

Council returned from Closed Session at 6:30 P.M.

Mayor Burt announced there was no reportable action.

#### Special Order of the Day

2. 2022 US Mayor Climate Protection Award Recognition

Mayor Burt commented the award was undeservedly presented to the Mayor and was an award achieved by staff and with the work of consultants, and they deserved it. He

acknowledged the folks involved, who were present for recognition. He outlined what the project entailed. He presented the award to the team, and a photo was taken.

3. Palo Alto Art Center and Palo Alto Art Center Foundation presentation of Fire Transforms exhibit and Climate Connections series

Mayor Burt acknowledged Karen Kienzle and Karen Kwan of the Palo Alto Art Foundation.

Director at Palo Alto Art Center Karen Kienzle spoke of the Art Center's exhibitions of Fire Transforms and Climate Connections. She provided slides highlighting what the exhibitions presented and referenced the goals of the exhibitions. She showcased some free public programs offered in conjunction with the show. Upcoming exhibitions would focus on water and contemporary art and, in the summer, there would be a juried exhibition exploring the theme of earth.

Director of Development at Palo Alto Art Center Foundation Karen Kwan discussed City budget cuts impacting the Exhibition Program. She looked forward to collaborating with the City in furthering the Sustainability and Climate Action Plan.

Mayor Burt expressed his appreciation for the Art Center Foundation.

Council Member Cormack suggested the Art Center have a table at the Workshop on Climate Action in October.

Agenda Changes, Additions and Deletions

None.

#### **Public Comment**

Ken Horowitz believed Cubberley was an important priority for the City and was looking forward to the newly elected City Council and School Board members addressing it. He hoped the School Board liaison of the Council would ask Don Austin at next month's meeting what he thought about the future of Cubberley. He wondered if funds could be found for Cubberley.

Lisa Forssell served on the Utilities Advisory Commission but was representing herself and addressed Measure L and the differences in the City's gas utility and PG&E. She asked the Council to consider not lowering the cost of fossil fuels, which needed to be transitioned away from, compared to electric power and urged the public to vote for Measure L.

Matt Schelgel discussed the ongoing climate crisis and the importance of stopping the use of fossil fuels.

Aram James read some information regarding the use of canines and the Holocaust. He would ask Senator Josh Becker and Assemblymember Marc Berman to address legislation ending the use of police canines.

#### **Consent Calendar**

- 4. Approve Minutes from the September 12, 2022 City Council Meetings
- 5. Approval of Outage Management System (OMS) Contract C23184285 With Milsoft Solutions Inc. in the Amount Not to Exceed \$625,994 Over a 5-Year Term
- 6. Adoption of **Resolution 10072** Approving and Attesting to the Veracity of the City's 2021 Annual Power Source Disclosure and Power Content Label Reports
- 7. Approval of a First Amendment to Lease Between KG-Bryant, LLC, and the City of Palo Alto for the Premises Located at 526 Bryant Street for an Initial 12-month Term, at a Starting Base Rent of \$5,616.11 per Month and Increasing 3 Percent Annually
- 8. SECOND READING: Adoption of **Ordinance 5561** for Renovation of the Mitchell Park Dog Park as Recommended by the Parks and Recreation Commission (FIRST READING: September 12, 2022 PASSED: 7-0)
- 9. SECOND READING: **Adoption of Ordinance 5562** Approving the Police Department's Military Equipment Use Policy Under AB 481 (FIRST READING: September 12, 2022 PASSED 7-0)

#### **Public Comment**

Aram James asked the City Council to look at AB481 and transparency, to take it off the calendar, discuss it more thoroughly, and bring it back up.

**MOTION:** Council Member DuBois moved, seconded by Mayor Burt to approve Agenda Item Numbers 4-9.

Council Member Tanaka registered a no vote on Agenda Item Number 5.

MOTION PASSED ITEMS 4, 6-9: 6-0

**MOTION PASSED ITEMS 5:** 5-1, Tanaka no

Council Member Tanaka thought it important to notify people in the event of power outages but that there were ways of doing it at a lower cost and would rather see funds allocated toward reducing outages.

#### **City Manager Comments**

City Manager Ed Shikada provided an update related to the pandemic. Upcoming was the Great Glass Pumpkin Patch. Over the next week or two, folks would be receiving the Annual Community Survey. He highlighted the website of cityofpaloalto.org/sustainabilityhub regarding the City's Climate Action Plan, and tools were available at

cityofpaloalto.org/goelectric for those interested in taking action. Upcoming City Council meetings: October 3, S/CAP Update (Part 2) as well as Council discussion and potential action on taking positions on the November 2022 ballot; October 17, a prescreening of the developmental proposal related the Creekside Inn on El Camino Real and the 2022 Green Building updates; October 24 and beyond, NVCAP, Parklet Standards, and Economic Development Study Session. The October 10<sup>th</sup> Council meeting would be cancelled.

#### **Action Items**

10. S/CAP Update and Initial Council Action: Acceptance of Sustainability and Climate Action Plan (S/CAP) Goals and Key Actions; Review of Proposed Reach Code Changes; Adoption of Resolutions Adopting Advanced Heat Pump Water Heater Program Guidelines, Creating and Funding Electrification Reserves and Adopting a Carbon Neutrality Goal; and Approval of Budget Amendments in the Electric Fund, Gas Fund, and General Fund

Mayor Burt declared there would be a continuation of this item on October 3 for discussion and expected actions the Council would take, but because it was so comprehensive, the Council and the public would be brought up to date on the facets of the program tonight. There would be opportunities for public comment at both meetings but asked the public speak on only one of the two nights, which the public could decide.

Public Works Director Brad Eggleston noted the proposed items represented the culmination of staff and the S/CAP Ad Hoc Committee's work over the past year. The bulk of the staff presentation would be divided into three main parts with a review of the proposed S/CAP goals and key actions, the proposed Green Building Ordinance items in advance of them coming to Council for review in October, and the group of actions that would allow the launch of the City's proposed new Advanced Heat Pump Water Heater Pilot Program. He emphasized the intradepartmental nature of the S/CAP work. He briefly reviewed information setting the stage for some of the actions being proposed. He shared slides of Palo Alto's GHG emissions for 1990 through 2020. He noted what needed to be focused on by 2030 to reach the 80 x 30 goal. He supplied slides outlining ongoing work by staff, the S/CAP Ad Hoc Committee and Working Group and Working Group teams going on in 2022. The first new program being recommended for Council approval was the Advanced Heat Pump Water Heater Pilot Program, and a key next step was for staff to update the S/CAP Three-Year Work Plan to include the work needed in other areas, which were critical. After these items being before Council this week and next week, the staff's next priority would be updating the Three-Year Work Plan with a goal of bringing it back to the City Council by the end of calendar year 2022 for acceptance. He acknowledged valid concerns regarding increasing the electric demand through these programs. They were promoting heat pump water heaters citywide while grid modernization work occurred. Grid modernization was a high priority and necessary to support wider conversion on a citywide scale of gas equipment to electric and would be part of their planning going forward.

Sustainability Manager Christine Luong displayed slides of the fourth version of the S/CAP goals and key actions. She indicated what the prior three versions entailed. The fourth version was meant to be a high-level roadmap to achieve the 80 x 30 goal. Once Council accepted the goals and key actions, they would be able to commence the CEQA evaluation of the full S/CAP. The full goals and key actions were in Attachment A on Packet Page 104, and slides had been prepared in the event Council wanted to discuss them in detail. The eight areas of S/CAP were all equally important but three – energy, electric vehicles (EVs), and mobility – had the highest potential for the largest GHG emissions reductions. She indicated what the key actions for the climate action area covered. There was one staff and Council action, which was to present options to Council for consideration to accelerate EV mobility and energy emissions reductions activities. Slides were furnished regarding goals, key action categories, and key performance indicators (KPIs) for energy, EVs and mobility. Goals and KPIs for water were presented. She furnished goals, key action categories, and KPIs for climate adaptation and sea level rise, restoring and enhancing the natural environment, and zero waste.

Mayor Burt mentioned there was more in Attachment A in the Staff Report than what had been summarized, and Attachment A was a very extensive update to the S/CAP goals and key actions, and all were important elements of the Compressive Climate and Sustainability Plan.

Council Member Filseth stated some slides indicated other reductions to be determined would be needed in addition to what was in the program to reach the 230,000 metric tons a year by 2030 and asked how close we would get to that goal if the other reductions yet to be determined was not done.

Director Eggleston recalled being 7% away and would have to calculate that into thousands of metric tons.

Mayor Burt referenced Slide 3 indicating doing away with fossil fuels was costly, but he remarked it was more cost efficient over the long and medium term. He spoke of alternative ways of replacing fossil fuels. Slowing climate change was an urgent need, and Palo Alto could have a high impact on what other cities, etc., would do. This would be addressed more with the Committee Report.

Council Member Cormack indicated the gap between the complicated details and what people were seeing and feeling needed to be bridged. It would make a difference what individuals would be asked to do and what the community would do regarding Section C5 on Page 108. Electric grid modernization (Page 110) needed to be discussed in significant detail. Electrifying fleet vehicles (Page 112) was a huge opportunity and beyond what individuals would do. Decisionmaking had been delayed until and unless there was a bicycle and pedestrian transportation plan, and parking had been talked about as well (Page 114). The water portfolio was remarkably important, and she would have comments in the Reach Code section. People started worrying more than a few years ago regarding the levee (Section S3 on Page 119).

Council Member Tanaka inquired if a lot of the electrical supply was renewable and provided by solar and wind; if hydropower was dropping because of the drought; and where the power came from at night with no sun or wind. He was interested to know the pure carbon output from electricity. He wanted to know if it could be calculated how much carbon would be extracted and the return on investment by the various programs and what source or program would extract the most amount of carbon for the dollars spent.

Director Eggleston confirmed a lot of the electrical supply was renewable and provided by solar, wind, and hydropower. He could have Utility Staff speak to the specifics of hydropower and the drought. Some work had been done over a year ago regarding carbon reduction and return on investment. They were trying to look broadly at the rough level of carbon reduction and cost in the Three-Year Work Plan, but there was not a plan to do an in-depth financial analysis.

Assistant Director of Resource Management Jonathan Abendschein specified the power at night came from a mix of hydropower, wind, and landfill gas. If those sources were not sufficient, power from the grid would be used. He explained carbon-free energy was sometimes put into the electric system and replaced grid power and gas power plants. He referred to a carbon neutral electric portfolio goal. He would get back to the Council as to the pure carbon output from electricity, as an annual report was coming up.

Council Member Stone considered this critical. He asked the current percentage of the tree canopy; if staff had plans for getting the additional tree canopy percentage needed; if the plan made the distinction of planting young or mature trees or tree size; and if the plan would extend the ban on commercial use of gas-powered leaf blowers for commercial use. He encouraged commercial use be banned.

Director Eggleston declared the current tree canopy was 36%. There were a number of programs in the City's Urban Forest Master Plan, which had the goals of expanding the canopy as well as tracking the progress.

Urban Forester Pete Gollinger remarked the programs in the Urban Forest Master Plan focused on adding additional trees while the new ordinance focused on preserving mature trees and on native climate adaptive species.

Sustainability Manager Luong commented the new law would be followed, which would phase out all gas-powered gardening and lawn equipment for residential and commercial. She believed the phase out on the sale, not use, of new units would start in 2024.

Mayor Burt expressed phasing out existing gas-powered gardening and lawn equipment was a separate issue.

Council Member DuBois indicated he was a member of the Ad Hoc, and his input was reflected in the report and presentation.

**Public Comments** 

Lisa Forssell (In-Person) served on the Utilities Advisory Commission but was representing herself. She supported the Heat Pump Water Heater Pilot Program and favored the option of a 7-year \$20 per month payment period, but all options were viable. She supported all Reach Codes as proposed in the report. She inquired if there had been outreach to local labor unions regarding the development of an electrification workforce. She voiced that Low-wattage EV chargers and heat pumps would make a difference in the grid health and modernization costs.

Carol Kiparsky (In- Person) hoped all would vote to implement the S/CAP. She opined that in the first year single-occupancy vehicles, E-busses, etc., should also be focused on in addition to the Heat Pump Water Heater Project and that the burden of climate change should be placed on the fossil fuel industry, not individual citizens, which the key action addressed.

David Sacerdote supported the S/CAP but thought it needed to go further in working for a full phaseout of stoves, etc., by the mid-2030s and that it would be ideal to have a planned conversion of whole neighborhoods from gas to electric.

Peter Drekmeier was more excited with carbon sequestration over carbon offsets. He spoke of pyrolysis being an additional sustainability technology. He would love to see a focus on planting more oak trees.

Katie Rueff was excited by the prospect of rolling out the Heat Pump Water Heater Turnkey Program. In the future, she and the youth of the PASCC would like to see a partnership between the City and the youth climate movement.

Pat Martin was Building Manager for the Peninsula Conservation Center. When the Council was ready, they could provide suggestions for making the permitting and installation go more smoothy, quicky, and hopefully less expensive for folks switching from rooftop gas units to electric heat pumps.

Cedric Pitot de La Beaujardiere supported heat pump water heaters and HVAC systems. He encouraged the Council to support the increased use of solar panels to offset the additional electricity that would be used by the electric appliances and encouraged increasing incentives, such as buying and selling from utility customers at the same price, as the current pricing model seemed to be a disincentive to get solar. He was encouraged by reducing carbon as well as the efforts to sequester and draw carbon from the atmosphere and pointed to regeneration.org.

Robert Neff supported heat pump water heaters and the switch to EVs. He stated gas heating of homes had not been addressed, and there would still be plenty of carbon emissions from EVs if only cars were depended on for transportation. He asked for an accelerated option of the mobility changes called for in the Sustainability Plan. He voiced that streets needed to be comfortable for pedestrians, bicycling, etc.

Julia Zeitlin, a member of the Ad Hoc Working Group and co-founder of PASSC, urged approval of the S/CAP ASAP. She suggested developing technology, such as bidirectional charging, be explored to alleviate grid stress. She believed a 2030 carbon neutrality program should be adopted that would work in tandem with the 80 x 30 goal.

Vicki Veenker was encouraged by the ideas of how to move more aggressively toward clean energy, 80 x 30 goals, and carbon neutrality by 2035. She encouraged Council to support the programs phasing out gas appliances at their end of life and programs helping residents finance new heat pump appliances by rebates or other means and asked commercial building owners to participate similar to residential owners, such as Key Action Item E2 in the draft S/CAP.

Hamilton Hitchings requested staff be more conservative in sea-level rise protection projects and that areas of Highway 101 protection be prioritized. He suggested adding geographic redundancy to the electric grid and asked that heat pump water heaters for older houses be optional. He supported paying for residential rooftop solar and opined the City should resist NEM 3.0.

Matt Schlegal (In-Person) asked everyone to stop burning fossil fuels.

Winter Dellenbach spoke of Palo Alto's strong tree protection ordinance and of the many trees being saved and planted. She encouraged planting as many oaks as possible.

Sherry Listgarten appreciated the work being done. She thought there were physical and mental health benefits in cleaning up the air and adding trees.

Dashiell Leeds was Conservation Organizer for the Sierra Club Loma Prieta Chapter, and the Chapter supported the rapid approval and implementation of the S/CAP, the Advanced Heat Pump Water Heater Program, and the inclusion of the carbon neutrality goal. He provided information in reference the risks of gas cooking from a 2013 meta-analysis, and he hoped to achieve a future without operational gas pipelines.

Mayor Burt announced staff would present the Reach Code and the Heat Pump Water Heater Program.

Chief Building Official George Hoyt gave a presentation on the Green Building and Local Energy Code updates. He specified the California Building Code Standard was updated every three years, and the current code cycle covered January 2020 through December 2022. He referenced what was needed for local jurisdictions to adopt local building energy standards more efficient than the State's Energy Code and amendments more stringent than the State's Mandatory Green Building requirements. Palo Alto adopted Green Building regulations and local energy standards in 2008. He specified what the local regulations were intended to create. He rehashed the 2019 through 2022 building code cycle. City Council needed to approve a new set of Reach Codes by November 2022. He discussed that the 2023 through 2025 State Energy Code encouraged electric heat pump technology and required construction to meet all electric-

readiness standards. Local amendments from the 2019 Reach Codes would be carried forward on the proposed 2022 Reach Codes with additional requirements, which he discussed. The proposed 2022 Reach Codes would be effective for a three-year period starting January 1, 2023. He presented the proposed requirements for single-family, multi-family, and nonresidential buildings. He noted that the numbers presented on Slide 27 differed slightly from the numbers in the Staff Report. He outlined the proposals for water efficiency requirements and carbon limits related to concrete use in new construction buildings.

Council Member Cormack asked if the carbon limits were low-carbon concrete and if it was substantially more expensive than regular concrete. She was concerned that there was not enough being done with regard to water. The Council had a policy of supporting the Bay-Delta Plan, which could require using less water. She considered water reuse within buildings with a Hydraloop system and questioned if people should be allowed to put in front lawns with new construction.

Chief Building Official Hoyt confirmed carbon limits were low-carbon concrete, which was not substantially more expensive.

Council Member Stone understood the City's Green Building Ordinance was anticipated to provide an additional 1% to 1.5% of the remaining emissions reductions needed to achieve the 80 x 30 goal and inquired if the anticipated reduction took into account the additional emissions likely caused by demolition and new construction. He requested staff analyze those critical impacts. Related to projected GHG emission reductions, he requested staff explain upstream fuel emissions and which number was being considered in meeting the 80 x 30 goal. He asked staff how likely it would be that all households would convert to heat pump water heaters and how long would it take and if the pilot lasted until 1,000 units were reached. He was concerned there was much to be done in a short amount of time and that it should be expedited.

Director Eggleston remarked the 1.5% did not include additional emissions of demolition and new construction, which were consumption-based GHG emissions. Most of the proposals in the code updates dealt with reducing ongoing emissions. The carbon issue may have been the first opportunity to look at doing consumption-based reductions.

Assistant Director Abendschein [noted upstream fuel emissions were 3:47:54] fossil fuels from the ground and transporting them to where they were burned. Most GHG emissions inventory methodology, including the standard methodologies they used to monitor GHG emissions goals, did not include a focus on upstream emissions for reducing GHG emissions. However, there had been some discussion at the UAC and at the Council of tracking and acknowledging upstream emissions, so both numbers were presented wherever possible. The likelihood that all households would convert to heat pump water heaters and how long would it take would depend on many factors, including program designs and especially engagement and marketing efforts. A lot of things could change between now and 2030, and the Air Resources Board rule eventually filtering into public awareness could cause acceleration. A lot could be done to

influence and control the pace of adoption. The pilot would last until 1,000 units were reached, and the goal was to achieve that by the end of 2023.

Council Member Filseth asked for an explanation of embedded carbon limits performance compliance; why there would not be an estimate of the amount of carbon in a new building; and if at some point there would be an estimation of the amount of concrete in a new building. Being that Reach Codes were being considered and not strictly 80 x 30, he wanted to see calculations of how much carbon would be released through embedded emissions.

Senior Resource Planner Utilities Christine Tam indicated the two ways to meet the low-carbon concrete requirement, and a table would be included in the Green Building Ordinance laying out the calculation. Why there would not be an estimate of the amount of carbon in a new building came back to the Scope 3 definition. Due to there being different types of building materials, she thought it was difficult to specify the carbon intensity for a whole new building.

[\_\_\_\_ 3:54:30].

Director Eggleston expressed regarding the estimation of the amount of concrete in a new building that the consumption-based GHG inventory and embedded emission materials were not part of the  $80 \times 30$  goal, and the direct emissions part of the  $80 \times 30$  goal was the ongoing emissions, which was the current focus. In the future, Scope 3 emissions would be looked at, which would include embedded carbon.

Mayor Burt expressed this was one of the first steps in looking at Scope 3 emissions and the embedded carbon in consumption. The process in subsequent years would pursue carbon released through embedded emissions. He expressed that with the acceleration in requirements and technologies, Reach Code updates would need to be revisited and updated more than every three years. This Reach Code as a set of programs in energy, water, electrification, and natural gas elimination on commercial and residential new construction had been considered, but excessive water-consuming landscaping had not moved forward and was something Council wanted to look at in the future. Once the Reach Code was approved, there would be value in organizing and putting together the code to date and the new code items in different packages of residential and commercial on electrification and water, so there would be understanding of the whole set of code requirements.

Assistant Director Abendschein discussed the Heat Pump Water Heater Program. He stated people needed to retrofit their homes to achieve the 80 x 30 goals, and staff and the S/CAP Committee were proposing an ambitious Advanced Heat Pump Water Heater Pilot Program. He discussed the goals of the program, installation pricing, the marketing plan, and benefits of heat pump water heaters. He noted the program was different than anything they had seen, but they were drawing on a range of innovations and features that had been tested in other agencies. He provided the estimated cost of getting 1,000 heat pump water heaters installed and provided three funding sources for the up-front funding. He outlined how funds coming from reserves would be repaid over time. He indicated how they envisioned the program would

scale once the 1,000 water heaters in the pilot program were reached and as the pilot program progressed how it would help in designing the next stage. He outlined what would be required of Palo Altans if all the proposals were approved.

Director Eggleston presented the recommendations and next steps. They were looking for Council direction concerning acceptance of the S/CAP goals and key actions. They had resolutions of the design guidelines for the program, establishment of the electrification reserve, authorized uses of the Cap-and-Trade Funds, and budget actions. Staff and the Ad Hoc Committee agreed a next step ought to be setting a carbon neutrality goal and planning for how that would be met beyond 80 x 30, which was not part of accepting the goals and key actions, the Reach Code, or the Heat Pump Water Heater Program but was an attachment that was a resolution to establish that goal. Along the lines of grid modernization and issues of having workforce available, there was discussion of adding a new priority to the City's legislative guidelines that would help support expanding the workforce statewide. He provided the staff-recommended motion. The next steps would be expected actions either tonight or October 3, Making Better Choices in Your Home Workshop on October 15, and Council considering the Green Building and Reach Code updates for approval on October 17. With Council approval of the recommendations on the Advanced Heat Pump Water Heater Program, it would launch late 2022 or early 2023 but would set in motion the steps for staff to get that in place. Following Council's acceptance of the goals and key actions, an important next step would be updating the S/CAP Three-Year Work Plan and bringing it back to Council in December. They expected to bring back to Council the full S/CAP with the CEQA for approval and certification by next spring. He hoped to see many engaged community members at the Making Better Choices in Your Home Workshop on October 15.

#### Public Comments Round Two

Matt Schlegel thought that 20 heat pump water heaters a week needed to be installed to meet the 1,000 goal and hoped effort would be put in community outreach, which was a critical component. He started an electrical panel upgrade in July and did not have approval and hoped that process would be streamlined.

David Coale supported staff's recommendation for the S/CAP, the Advanced Heat Pump Water Heater Proposal, and the Reach Code for water heater replacement with heat pump water heaters. He believed it should be expanded to home space heating and that replacement of gas packs with HVAC heat pumps for commercial buildings should also be in the Reach Code. He opined that the update of the bike and pedestrian plan was a must.

Aram James thought water conservation and quality needed to be addressed. He discussed the environmental impact of U.S. Military bases in other countries. He wanted to convert to a water heat pump at his home.

Mayor Burt hoped to get an update of lessons learned and recommendations from the Ad Hoc Committee.

Council Member Filseth inquired if a 220-volt hookup was needed for the pilot and what would be the circumstances that a panel upgrade would be needed. He voiced the program was a good idea and an appropriate use of the Projects Reserve and the Cap-and-Trade Fund.

Assistant Director Abendschein replied that available water heaters were 240 volt. There was a 120-volt water heater coming out, which would be looked at as they became more available. Most water heaters running a 240 volt would need a new electric circuit and a panel upgrade, which was about 20% to 25% of cases, or other types of building modifications.

Council Member DuBois questioned if someone was to go the turnkey route and pay for it up front if they would be eligible for federal rebate. He hoped this would pass and staff would start working on the program. On the Climate Plan update, staff needed to begin the CEQA process. Carbon neutrality needed to be done. The Green Code updates would come to the Council in October. The Ad Hoc Supplemental Report was upcoming, and there was additional projects, and it was important a project plan be laid out. When it was time for the Heat Pump Program, a lot of the projects should be referred to staff to get them incorporated onto a work plan and have them come back to Council.

Assistant Director Abendschein expected those going the turnkey route and paying for it up front would be eligible for a rebate, but some would need to consult with their own tax professionals to determine eligibility. They expected a person would be eligible for 30% of the cost of \$2,700 if the install was done after January 1 but depended on income levels, etc.

Council Member Stone asked why there was not more aggressive language requiring a higher percentage of EV parking spaces for new nonresidential buildings. He was interested in the percentage of EV drivers charging their cars at work on a given day. He asked if the Heat Pump Water Heater Program would provide free installation and a free water heater to eligible income-qualified customers. He would like to see more outreach, and he provided some suggestions. He encouraged those concerned about the increased demand on the power grid to read the staff report, which explained it well, and to reach out to staff and other experts in the community.

Chief Building Official Hoyt voiced the goal of the service equipment would be sized appropriately for EV-ready equipment. The numbers were settled on [as a fair 4:38:57] increase of current numbers and to allow proper sizing in transformers and the demand on the service grid as new buildings were built and to not oversize the switch-gear equipment and add additional cost to building owners.

Assistant Director Abendschein added there was uncertainty as to how electricity would be provided to all the different types of vehicles. There had been much discussion about how to get charging. They did not want to assume that in 10-15 years 100% of people would have a charger in their location. Eligible income-qualified customers would receive free installation and a free water heater.

Council Member Cormack stated that using the internal loan rate instead of a market rate made the Heat Pump Water Heater Program work better. She inquired if the \$150,000 for marketing and outreach was for a consultant to do the work. She indicated conversations and education would occur at the October 15<sup>th</sup> Workshop and it would not be just providing data. She questioned if the carbon neutral goal was achievable. Staff needed to figure out a plan for landlords of rental properties to receive utilities information. Instead of saying Advanced Heat Pump Water Heater Pilot Program, she suggested saying, "Let us help you do the right thing." The Ad Hoc would talk about how Council would do this work going forward, and a student member participating was an opportunity. Implementing the S/CAP was required to protect quality of life in Palo Alto. The pilot was appropriately ambitious.

Assistant Director Abendschein confirmed the \$150,000 for marketing and outreach was for consulting, internal staff time absorbed within the existing budget.

Sustainability Manager Luong indicated the carbon neutral goal was achievable.

Council Member Tanaka asked why not also consider solar water heating, which also had a quick return on investment; systems using an air conditioner condenser to heat water; or a condensing water heater instead of just heat pump water heaters. His was concerned the program represented only about 2% of the goal at a cost of \$7.5M and other things could be considered, which would be a fraction of the cost. He asked how many water heaters are replaced every year in Palo Alto. He wondered if this was the highest [invested 4:45:44] use of [inaudible 4:56:46] resources as opposed to a transportation program and if that would have a bigger impact on overall carbon output. He asked if there were calculations comparing this program to other programs. He questioned what was delaying the Scooter Share Pilot Program, which was approved three years ago. He was concerned there were other programs that could have a bigger impact in terms of carbon output.

Assistant Director Abendschein expressed there had been a solar water heating program for a long time, which was retired a couple years ago. There were struggles in having a strong enough return on investment to get people to participate. They were supportive of solar water heating but had not found a way to make the programs work. It could be looked at as a complement to a heat pump water heater. He was interested in Council Member Tanaka sharing information and numbers he had. There were some innovative water heating systems coming out, and the condenser was one. For this pilot program, they were trying to keep it as simple as possible, so there was a focus on one technology. There was no reason there could not be expansion to other technologies once they became familiar with the heat pump technology. He indicated the State's Go Green Financing Program could accommodate these kind of systems, and as whole-home electrification pilots were expanded, a variety of systems would be looked at. Condensing water heater systems were looked at, but they did not approach the efficiency of a heat pump water heater with regard to emissions reductions. They estimated 1,100 to 1,400 water heaters were replaced per year, based on the average lifetime and number of homes, in Palo Alto. Calculations comparing this program to other programs were presented in April 2021 as part of the impact analysis, and those could be forwarded to

the Council. Transportation was the majority of the remaining emissions reductions that needed to be achieved. There was a similar amount of investment being made in transportation-related programs. There was a presentation to the UAC in early September, and he would share that link. This was all hands on deck, and everything needed to be focused on to achieve the 80 x 30 goals, and there was an interest in jumpstarting building electrification.

Director Eggleston commented one element of the work was moving quickly to get a program in place, and this program focusing on heat pump water heaters was not meant to say every other possible solution had been looked at. This had the most parameters in what was trying to be achieved and seemed like something that could quickly be scaled with the community and actually get a program in place rather than spending time looking at other solutions. In the future, looking at other ideas and finding ways to include them could be considered. The Scooter Share Pilot Program had been delayed due to staff vacancies in the Office of Transportation and could get more attention soon.

Mayor Burt declared that doing a successful model and large-scale pilot would allow the Heat Pump Water Heater Program to be scaled and would serve as a model for future appliance upgrades and other needed programs. The funds being used were predominantly a revolving loan, not an expenditure. Heat pumps were rapidly evolving, and the foundation of this program could provide other scaling opportunities in the coming years. He voiced some of the lessons and advances in EV charging. Council would discuss and go into action regarding EV charging on October 3. Regarding the heat pump water heaters, the general framework and many components of the plan were aligned with the proposal that Carbon Free Palo Alto had been working on for several years and had proposed to the City. They titled it Be Smart, and Council could call it that or come up with another brand name. There needed to be good marketing and branding as it was liable to be copied. There was an article, he thought in *The New Yorker*, that highlighted the Carbon Free Palo Alto BE Smart Program. He listed some of those involved in the this process, the community, Stanford, etc., and Palo Alto did not have staff capacity to do all that needed to be done, so figuring out how resources would be leveraged was needed.

Council Member Questions, Comments and Announcements

None.

Adjournment: The meeting was adjourned at X:XX P.M.

**MOTION:** Council Member XX moved, seconded by Council Member XX to

- Accept the proposed S/CAP Goals and Key Actions (Attachment A) as a summary of the City's workplan under the S/CAP Framework;
- 2. Direct staff to implement the Advanced Heat Pump Water Heater Program by:
- Adopting a resolution (Attachment C) approving the Advanced Heat Pump Water Heater Program Design Guidelines;

- B. Adopting a resolution (Attachment D) creating an Electrification Reserve, establishing reserve guidelines, and transferring \$4.5 million from the Electric Special Projects Reserve to the Electrification Reserve;
- C. Adopting a resolution (Attachment E) amending the City's Policy on the Use of Freely Allocated Allowances Under the State's Cap-and-Trade Program and authorizing the City Manager to use \$1.25 million from the Gas Utility Cap and Trade Reserve for the Advanced Heat Pump Water Heater program; and
- D. Amending the Fiscal Year 2023 Budget Appropriation (requires a 2/3 vote) by:
- (i) For the Electric Utility Funds:
- a. Increase Electric Resource Management Operating Expenses for Contract Services by \$4,763,000
- b. Decrease Electrification Reserve by \$4.5 million
- c. Decrease Electric Supply Operations Reserve by \$150,000
- d. Decrease Electric Distribution Operations Reserve by \$86,000
- (ii) (ii) For the Gas Utility Funds:
- a. Increase Gas Resource Management Operating Expenses for Contract Services by \$1.25 million
- b. Decrease Gas Cap & Trade Reserve by \$1.25 million
- (iii) For the General Fund:
- a. Increase Planning & Development Operating Expenses for Contract Services by \$250,000
- b. Increase Planning and Development Services Revenue for Inspection Fees by \$250,000
- Adopt a Resolution Adopting a Carbon Neutrality Goal to Further the Climate Goals of the Sustainability and Climate Action Plan (Attachment F)
- 4. Direct staff to amend the 2022 Utilities Legislative Guidelines (Attachment G) to include an Electrification Workforce Development guideline

#### **MOTION PASSED/FAILED: 7-0**

#### **Resolutions for 10**

- RESO 10073 Item 10 (MT 14606): S/CAP: approving the Advanced Heat Pump Water Heater Program Design Guidelines (Attachment C)
- RESO 10074 Item 10 (MT 14606): S/CAP: creating an Electrification Reserve, establishing reserve guidelines, and transferring \$4.5 million from the Electric Special Projects Reserve to the Electrification Reserve (Attachment D)
- RESO 10075 Item 10 (MT 14606): S/CAP: amending the City's Policy on the Use of Freely Allocated Allowances Under the State's Cap-and-Trade Program and authorizing the City Manager to use \$1.25 million from the Gas Utility Cap and Trade Reserve for the Advanced Heat Pump Water Heater program (Attachment E)
- RESO 10076 Item 10 (MT 14606): S/CAP: Adopting a Carbon Neutrality Goal to Further the Climate Goals of the Sustainability and Climate Action Plan (Attachment F)