

Welcome! The Webinar will begin shortly



Sustainability and
Climate Action Plan
Ad Hoc Committee

May 24, 2023

cityofpaloalto.org/ClimateAction

Acting Now for a Resilient Future

- **S/CAP Update and 2023-2025 Work Plan**
 - Feedback and Questions
- **Full Service Heat Pump Water Heater Pilot Program**
 - Feedback and Questions
- **S/CAP Ad Hoc Committee Comments**



Acting Now for a Resilient Future



S/CAP Update Community Engagement



Virtual Community
Engagement Workshop



S/CAP
Webinar
Series



Virtual, Public Ad
Hoc Committee
Meetings



Community Input
Online Survey



Community
Electrification Workshop

2020

2021

2022



- June 16, 2020: Launched the S/CAP Update



- April 19, 2021: Directed the Mayor to form an S/CAP Ad Hoc Committee



- December 13, 2021: Study Session on S/CAP and Ad Hoc Committee



- March 7, 2022: Joint Study Session with UAC



- April 11, 2022: Study Session on Earth Day Report



- September 27 and October 3, 2022: Council approved the S/CAP Goals and Key Actions which initiated CEQA review, recommended the creation of an Advanced Heat Pump Water Heater Pilot Program, and adopted a carbon neutrality by 2030 goal




California's Goal:

48% **BELOW**

1990 LEVELS
BY 2030

Carbon Neutral
BY 2045

Palo Alto's Goal:

80% **BELOW**

1990 LEVELS
BY 2030

Carbon Neutral
BY 2030



ENERGY



MOBILITY



ELECTRIC
VEHICLES



WATER



CLIMATE
ADAPTATION &
SEA LEVEL RISE



NATURAL
ENVIRONMENT



ZERO WASTE

S/CAP KEY ISSUE AREAS



CLIMATE ACTION

Reduce overall greenhouse gas emissions
80% below 1990 levels by 2030



ENERGY

ELECTRIFY BUILDINGS

Reduce the use of natural gas in buildings



MOBILITY

INCREASE ACTIVE TRANSPORTATION

Reduce overall vehicle miles travelled



ELECTRIC
VEHICLES

SUPPORT EV ADOPTION

Reduce transportation related greenhouse
gas emissions



CLIMATE
ADAPTATION &
SEA LEVEL RISE

PREPARE FOR CLIMATE CHANGE

Reduce impacts of climate change from sea
level rise and wildfires



NATURAL
ENVIRONMENT

ENHANCE BIODIVERSITY

Restore and enhance resilience of the
natural environment



ZERO WASTE

SUPPORT ZERO WASTE

Divert 95% of waste from landfills by
2030, leading to zero waste



WATER

FURTHER WATER CONSERVATION

Decrease water use and improve water
systems

Outcomes Needed by 2030



- Commute travel is reduced 20%



- Vehicle Miles Traveled (VMT) are reduced 12%



- 85% of all Palo Alto new vehicle purchases are EVs (up from 30%) for a vehicle fleet that is 44% EVs (50% in single-family households, 33% in multi-family)



- 40% of commuter trips into Palo Alto and 30% of visitor trips are made by EVs, 35% total (Currently 3%)



- Virtually all single-family gas appliances and virtually all commercial rooftop HVAC units are electrified



- Significant additional multi-family and commercial building electrification and other emissions reductions to be determined



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- April 19, 2021 Council Meeting

- Staff presented a draft Policy Framework
- Council supported the framework and added additional actions



- August 2021: First Draft of Three-Year Work Plan

- Includes estimates of staff and funding needs for implementation



- December 2021: Second Draft of Three-Year Work Plan

- S/CAP Ad Hoc Committee and Working Group Review

- June 14, 2022: Public S/CAP Working Group Meeting





P1. Complete grid modernization plan



P2. Launch effective programs for emissions reductions with highest impact and lowest cost



P3. Build community awareness and confidence in electrification



P4. Identify an additional 9% in emissions reduction opportunities to achieve the 80x30 goal



P5. By 2024 identify funding needed and potential funding sources for full scale implementation of highest impact emissions reductions










Climate Action Work Plan Highlights



Priority	2023	2024	2025
P1 (Modernize grid)	<ul style="list-style-type: none"> Grid modernization study completion, hire contractor Reliability/Resiliency Strategic Plan 	<ul style="list-style-type: none"> Begin a 5-7 year construction effort to increase reliability and transformer capacity Implement Reliability and Resiliency Strategic Plan 	
P2 (Launch programs)	Design and launch programs:		
	<ul style="list-style-type: none"> Full-scale HPWH program Pilot commercial HVAC Municipal electrification Downtown parking management program On-demand transit pilot 	<ul style="list-style-type: none"> Single-family whole home Full-scale commercial HVAC Full-scale multi-family EV charger program (tentative) 	Design and launch additional programs based on the 2024 studies (See P4 for other studies that may result in new programs) and the EV Strategic Plan
	Studies to guide program launches:		
<ul style="list-style-type: none"> EV Strategic Plan Multi-family and income-qualified EV work plan Bicycle Plan update 	<ul style="list-style-type: none"> Work plan for commuter and visitor EV charging and EV promotion Vision Zero program (tentative) 		

Climate Action Work Plan Highlights

	Priority	2023	2024	2025
      	P3 (Build awareness and confidence)	Build awareness of the need for climate action and the City’s services and achievements. Drive community actions to achieve S/CAP goals. Build confidence in the City’s electric infrastructure. Report results from new and existing programs:		
		<ul style="list-style-type: none"> • New program: HPWH pilot • Existing programs: <ul style="list-style-type: none"> • Existing Mobility programs • Multi-family EV charger 	<ul style="list-style-type: none"> • New programs: Full-scale HPWH program, commercial HVAC pilot • All other existing programs 	<ul style="list-style-type: none"> • New programs; Full-scale HVAC, multi-family EV charger • Existing programs
		<ul style="list-style-type: none"> • Seek ideas from community members and other experts • Monitor technologies and medium term opportunities 	<ul style="list-style-type: none"> • Multi-family and non-residential electrification study • Study highest potential community ideas/technologies 	<ul style="list-style-type: none"> • Evaluate new programs based on studies
	P4 (Additional emissions reductions)	<ul style="list-style-type: none"> • Evaluate implementation cost for full scale high impact / lower cost programs • Preliminary evaluations of potential funding sources 	<ul style="list-style-type: none"> • Decisions on how to fund priority electrification areas • Develop financial and operational plan for gas utility 	<ul style="list-style-type: none"> • Implement follow-up from prior-year studies
	P5 (Funding needs and sources)			



- Reduce water consumption while exploring water supply alternatives



- Develop and adopt a multi-year Sea Level Rise Adaptation Plan



- Minimize wildland fire hazards



- Increase Palo Alto's Tree Canopy and reduce pesticide usage



- Support the Green Stormwater Infrastructure (GSI) Plan



- Encourage food waste reduction, prevention, and recovery



- Eliminate single-use disposable containers and prioritize domestic processing of recyclable materials



Full Service Heat Pump Water Heater Pilot Program



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SWITCH YOUR WATER HEATER

Switching to electric is better for your health, your wallet, and the environment. Upgrade to a heat pump water heater with these new options.

FULL SERVICE SOLUTION

\$2,700 for a standard installation through a City contractor, which includes a rebate.

FULL SERVICE SOLUTION WITH MONTHLY PAYMENTS

\$1,500 for a standard installation through a City contractor with \$20 monthly payments on your utility bill for 5 years, which includes a rebate.

APPLY FOR A REBATE

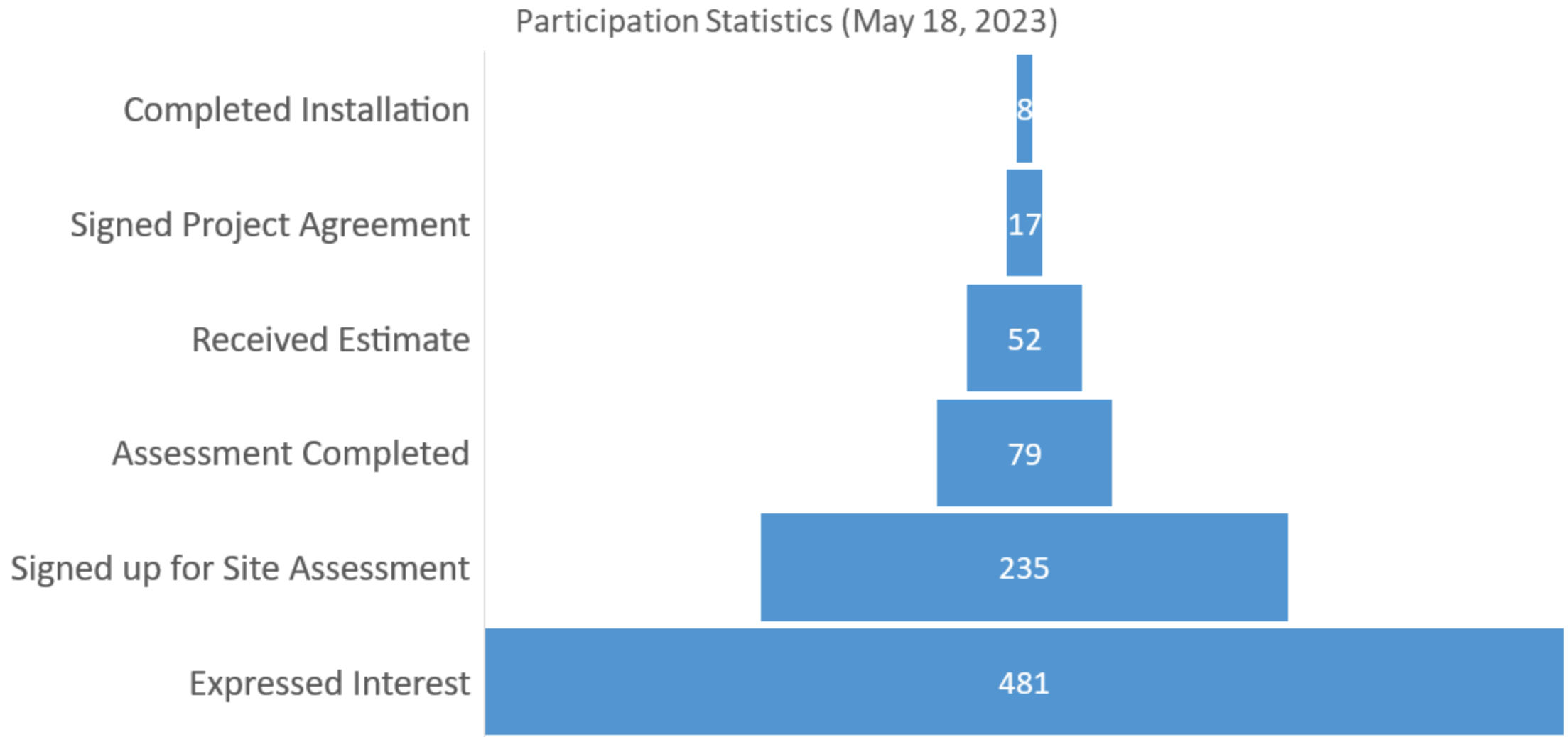
\$2,300 with an approved application. You choose your contractor.

www.cityofpaloalto.org/UpgradeYourWaterHeater



- Officially launched in February 2023
- Generated a lot of interest very quickly – more than anticipated
- Nearly 500 people interested, with most contacted by the City
- 8 HPWH installs completed, 9 scheduled – but a lot of progress behind the scenes
 - Interest list should all be contacted within the next couple of weeks, after that new participants will be contacted within a week
 - 79 site assessments completed, over 100 more scheduled, about 60 remaining to be scheduled
 - Productivity in getting people assessments and estimates is increasing
- Next major focus: increasing participant commitment rate and generating leads
- Marketing next steps – community partnerships (e.g. Silicon Valley 350), electrification marketing campaign, and traditional municipal / utility marketing
- Great City / contractor / community alignment – everybody is pushing for success

Full Service Heat Pump Water Heater Pilot Program







1. Certify the Comprehensive Plan Environmental Impact Report Addendum: Update to the Sustainability and Climate Action Plan (S/CAP)
2. Adopt a resolution Approving an Addendum to the Comprehensive Plan Environmental Impact Report and Adopting the Sustainability and Climate Action Plan
3. Accept the 2023-2025 S/CAP Work Plan
4. Review the 2023 Earth Day Report

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SUSTAINABILITY & CLIMATE ACTION PLAN

Thank You!

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**PALO
ALTO**