Resolution No. <u>10075</u> Resolution of the Council of the City of Palo Alto Adopting Design Guidelines for an Advanced Heat Pump Water Heater Pilot Program to Further the City's Sustainability and Climate Action Plan Goals

RECITALS

A. The Council has approved a Sustainability and Climate Action Plan Goal of 80% emissions reduction from 1990 levels by 2030, a Framework, and an Implementation Plan. A preliminary impact analysis reviewed by the Council on April 19, 2020 demonstrated that building and vehicle electrification was a critical part of achieving these goals.

B. The Council intends to establish various programs to promote building, appliance and vehicle electrification. Given State and Federal action on electric vehicles, local governments can be most effective in developing programs to promote electric vehicle charging and building electrification.

C. The Council finds that heat pump water heater technology is widely available, significantly reduces emissions when compared to natural gas water heating, and is a familiar technology that will allow the community to take immediate, manageable steps to reduce greenhouse gas emissions.

D. The Council finds that heat pump water heaters have lower grid impacts than other building electrification measures. The City's electric utility is undertaking a grid modernization effort, and Council wishes to prioritize heat pump water heaters while this grid modernization gets underway.

E. As a result, the Council wishes to prioritize the development of an ambitious Advanced Heat Pump Water Heater Pilot Program to convert gas water heaters to heat pump water heaters.

The Council of the City of Palo Alto ("City") RESOLVES as follows:

SECTION 1. The Council makes the following findings:

a) Prioritizing action on Advanced Heat Pump Water Heater Pilot Program ("the HPWH Program") does not preclude action on electrifying other types of equipment, action on Goals or Key Actions in other areas of the Sustainability and Climate Action Plan (such as Electric Vehicles or Mobility), or other parallel efforts to improve electric system reliability, streamline permitting, promote low-wattage vehicle charging and electrification strategies, or other barrier reduction strategies. The Council encourages continuing staff action and expects additional discussions in these areas.

- b) The HPWH Program would benefit electric ratepayers by increasing utilization of the electric distribution system, spreading the cost of maintaining the system over more units sold, and decreasing costs for all ratepayers in the long term.
- c) The HPWH Program would benefit gas ratepayers by avoiding future increasing environmental and transmission charges on gas use, by helping ratepayers begin an orderly, planned transition from natural gas use consistent with State and local climate goals, and by helping ratepayers adopt the most cost-effective method of heating water, lowering their utility bills overall.
- d) The HPWH Program is a "cost-effective demand-side management service to promote energy efficiency and energy conservation" under State Public Utilities Code 385(a)(3) because the cost of heating water using efficient heat pumps and low-cost Palo Alto electricity is lower than the cost of heating water using a gas water heater.

SECTION 2. The Council approves the Design Guidelines for an Advanced Heat Pump Water Heater Pilot Program (Exhibit A).

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SECTION 3. The Council finds that the adoption of this resolution is not subject to California Environmental Quality Act (CEQA) review because it is an administrative government activity that will not result in any direct or indirect physical change to the environment (CEQA Guidelines section 15378(b)(5)).

INTRODUCED AND PASSED: October 3, 2022

AYES: BURT, CORMACK, DUBOIS, FILSETH, KOU, STONE

NOES: TANAKA

ABSENT:

ABSTENTIONS:

ATTEST:

—DocuSigned by: Lesley Milton

City Clerk

APPROVED AS TO FORM:

DocuSigned by:

Amy Bortell

Assistant City Attorney

—Docusigned by: Patrick Burt

Mayor Mayor

APPROVED:

— DocuSigned by: Ed Shikada

City Manager

DocuSigned by:

Dean Batchelor Director of Utilities

DocuSigned by: Kiely S. Nosé

Director of Administrative Services

Exhibit A to Resolution No. <u>10075</u> Adopted by Council on <u>10/3/202</u>2

Advanced Heat Pump Water Heater Pilot Design Guidelines

The following design guidelines are intended to guide the development of an Advanced Heat Pump Water Heater Pilot Program ("the HPWH Program"):

- 1. The goal of the HPWH Program should be to achieve at least 1000 conversions of gas water heaters to heat pump water heaters with the goal of transitioning to a full-scale program intended to convert all gas water heaters in Palo Alto to heat pump water heaters.
- 2. The HPWH Program should include a marketing effort sufficient to increase awareness of the climate benefits and utility bill savings of heat pump water heaters over gas water heaters.
- 3. The HPWH Program should reduce barriers to residents in installing heat pump water heaters by measures including, but not limited to:
 - a. Turnkey installation of heat pump water heaters by a City contractor
 - b. Utility on-bill financing
 - c. Enhanced rebates
 - d. Partnership with third party financing programs
- 4. The HPWH Program should offer pricing to early participants attractive enough to compete with gas water heater installations.
- 5. The HPWH Program should take advantage of all utility-related benefits, such as increased revenues and decreased energy supply costs, to minimize program costs.
- 6. When setting participant pricing, staff should ensure that a) the HPWH Program is attractive to residents but that b) the HPWH Program achieves its goals within the amount of funding provided by utility-related benefits and any Council-approved funds.
- 7. On-bill financing should be attractive to participants, easy to understand, simple to administer, and accessible, which could involve features such as:
 - a. Uniform loan amounts that do not vary by project
 - b. Monthly payments that are similar to the on-bill savings experienced by most participants
 - c. Simple qualifications to participate (e.g. history of utility bill payment instead of using credit scores for qualification)

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Amy Bartell Amy.Bartell@CityofPaloAlto.org Assistant City Attorney City of Palo Alto Security Level: Email, Account Authentication (None)

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Kiely Nose

Kiely.Nose@CityofPaloAlto.org Director, Administrative Services/CFO

City of Palo Alto

Security Level: Email, Account Authentication (None)

Electronic Record and Signature Disclosure: Not Offered via DocuSign

Dean Batchelor

Dean.Batchelor@CityofPaloAlto.org **Director of Utilities** City of Palo Alto Security Level: Email, Account Authentication (None)

Electronic Record and Signature Disclosure: Not Offered via DocuSign

Ed Shikada

Ed.Shikada@CityofPaloAlto.org Ed Shikada, City Manager

City of Palo Alto

Security Level: Email, Account Authentication (None)

Electronic Record and Signature Disclosure: Not Offered via DocuSign

Holder: Vinhloc Nguyen Vinhloc.Nguyen@CityofPaloAlto.org Pool: StateLocal Pool: City of Palo Alto

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