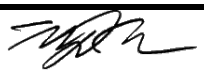
CITY OF OAKLAND

AGENDA REPORT

TO:	Edward D. Reiskin City Administrator	**FROM:**	Joe DeVries Deputy City Administrator
SUBJECT:	Acceptance Of Incentive And Technical Assistance For Heat Pump Water Heaters At Oakland Municipal Buildings	**DATE:**	November 17, 2022

City Administrator Approval  Date: Dec 1, 2022

RECOMMENDATION

Staff Recommends City Council Adopt A Resolution Authorizing The City Administrator To Accept In-Kind Technical Assistance And No-cost Installation Of Heat Pump Hot Water Heaters In The Amount Of $74,516.70 From Willdan Group Inc. At Nine Municipal Library Buildings To Further The City's Climate, Electrification, And Equipment Modernization Goals And Adopting Appropriate California Environmental Quality Act (CEQA) Findings.

EXECUTIVE SUMMARY

Approval of the proposed resolution will authorize the City Administrator to proceed with necessary facility upgrades at Municipal Building Locations in the City of Oakland (City) that will increase facility resilience, reduce maintenance costs, and further implementation of the City's Equitable Climate Action Plan (ECAP). These upgrades, which will adhere to the ECAP requirement that Oakland remove methane gas (aka "natural gas") in all buildings by 2040, will be completed at zero cost to the City, through a utility ratepayer funded program overseen by Pacific Gas and Electric Company (PG&E) and administered by Willdan, an energy services company. Specifically, Willdan will administer rebates and conduct a complete, "turn-key" replacement of old, gas-powered water heaters with new, energy-efficient, heat-pump water heaters, starting with Oakland Public Library branch locations, with the possibility of more facilities in the future. See ***Attachment A*** for a flyer describing the program.

REASON FOR URGENCY

Funding for this facility electrification program is first-come, first-served, and Willdan has advised City staff that funding may run out. Timely adoption of this Resolution by City Council will allow for the equipment replacement projects described herein to be completed within four months.

BACKGROUND / LEGISLATIVE HISTORY

City Council has declared that building electrification – the modification of buildings to ensure that all mechanical systems run on electricity rather than gas or other fossil fuel-based sources of energy – is an important goal. In July 2020, through Resolution No. 88267 C.M.S., City Council adopted the 2030 ECAP to increase climate resilience, advance equity, and reduce local greenhouse gas emissions. The ECAP includes Actions B-2 (Plan for All Existing Buildings to be Efficient and All-Electric by 2040) and B-5 (Require All Major Retrofits of City Facilities to be All- Electric), which direct staff to identify all possible opportunities to transition City facility energy use from gas to electric sources.

Additionally, ECAP Action A-1 (Fund Creation and Operation of Resilience Hubs), in conjunction with the need to identify City facilities that can operate as respite centers during heavy smoke, extreme heat, and other disasters as called for in the City's Local Hazard Mitigation Plan (Resolution No. 88706 C.M.S., adopted June 2021), require the City to modernize energy systems to the extent feasible in community-serving facilities to maximize the ability for those facilities to perform critical functions during and after disasters and emergencies.

The City's main funding source for municipal facility equipment upgrades is the Capital Improvement Program (CIP) budget, along with Measure KK, approved by the Oakland voters in November 2016. However, these funds are insufficient to cover the full suite of maintenance and modernization upgrades needed for all City facilities and public infrastructure.

The California Public Utilities Commission (CPUC) regulates utility companies, including electric and gas utilities, and oversees more than $1 billion annually in utility ratepayer-funded programs to support energy efficiency and electrification. PG&E oversees implementation of these funds in their territory. One of the programs administered by PG&E with these funds is the Government and Heat Pump/Hot Water Electrification Program (Program), delivered by Willdan under contract to PG&E.

Through a competitive bidding process, Willdan won a contract with PG&E to administer the Program. Through the Program, Willdan and their local contractors assess and enroll facilities, and provide turnkey installation services to replace existing gas-powered domestic hot water systems with efficient electric heat pump water heaters, including equipment and installation, all at no cost to the City. The Program is primarily geared towards schools and libraries. See ***Attachment A*** for the Program flyer.

ANALYSIS AND POLICY ALTERNATIVES

City-owned facilities, including Oakland Public Library branch buildings, have extensive deferred maintenance that exceeds the capacity of the combined CIP and Measure KK budgets in any

given budget year. As a result, staff in the Oakland Public Works Department (OPW) and in the Sustainability and Resilience Division of the City Administrator's Office regularly seek external sources of rebates, incentives, and technical assistance to defray and reduce costs of maintenance and upgrades. Utility energy efficiency (EE) and electrification programs operated by PG&E through local contractors have long been a source of these services.

This year, the City has an opportunity to enroll in the PG&E Program administered by Wildan. After conducting assessments for all City library branch locations, staff from Oakland Public Library and the Sustainability and Resilience Division identified between nine and ten sites appropriate for the Program. These sites (listed in ***Attachment C***) were selected because they require no significant additional electrical work and have appropriate hot water demand for the available replacement model. Oakland Sustainable and Resilience Division staff as well as Library Facilities staff contacted staff in Berkeley and Piedmont, cities that have already utilized the Program, and received universally positive recommendations as exemplified in ***Attachment B***.

The "1-for-1", turnkey replacement program will replace up to 10 gas water heaters at zero cost to the City (see the draft agreement at ***Attachment C***) – necessary equipment upgrades that were otherwise quoted at $74,516.70. Several of these systems are close to the end of their useful lives, therefore these upgrades will avert near-term expenses, as well as reduce future maintenance costs and result in overall energy efficiency gains for the City.

Participation in this program will entail additional benefits, including:

- Electrification: Replacing existing gas systems with energy-efficient heat pumps accomplishes an important step towards overall facility electrification. Electrification is a critical goal for the City due to the detrimental climate, health, and safety impacts of continued methane gas use for buildings. Additionally, switching from gas to electricity allows the City to take fuller advantage of the clean, renewable electricity provided by East Bay Community Energy.
- Leadership: Demonstrating electrification in Oakland's own facilities helps to prove the feasibility of commercial facility electrification and helps to show increasing demand for clean energy technologies.
- Resilience: Replacing outdated equipment at public-facing facilities with clean electric alternatives reduces the possibility of future leaks and maintenance calls and accomplishes an important step toward enabling these facilities to act as resilience resources in the community in the event of disasters or emergencies. These upgrades also help to "future proof" facilities against rising gas prices as an increasing share of energy use across California is switched to electricity, and the financial burden of gas safety liability and maintenance falls to a shrinking number of customers.
- Operational efficiency: Heat pumps are more energy efficient than gas units. They can also more readily be deployed in demand response programs, furthering the City's ability to rapidly reduce electricity use during peak demand periods such as that experienced in the September 2022 heat dome event.
- Appropriate-sizing: Several of the gas-powered water heaters identified for replacement are larger than needed given the actual levels of hot water consumption at the sites, resulting in wasted energy.

Adoption of the proposed resolution advances the Citywide Priority of vibrant, sustainable infrastructure by increasing energy efficiency at municipal buildings and replacing outdated infrastructure.

FISCAL IMPACT

The equipment upgrades addressed by Willdan are turn-key and will have no immediate fiscal impact or cost. There will likely be long-term operational savings, due to reduced deferred maintenance, increased energy efficiency, and avoided equipment replacement costs. Given that the units would need to be replaced eventually, and the City's mandate that major retrofits must be all-electric, the estimated cost of the upgrades ($74,516.70) can be considered as baseline savings.

PUBLIC OUTREACH / INTEREST

Due to the technical nature of the work, and the fact that no operational or programmatic changes to the facility are associated with the project, no additional public outreach was deemed appropriate.

COORDINATION

Staff from Oakland Public Works, the City Administrator's Office / Sustainability and Resilience Division, and Oakland Public Library have coordinated in scoping the project and crafting a preliminary Agreement with Willdan. The Agreement was reviewed by the City Attorney and Finance Department Budget Bureau.

SUSTAINABLE OPPORTUNITIES

Economic: Acceptance of these funds will allow for upgrade of municipal facilities at significantly lower cost than traditional methods and prevent damage from leaks that could occur as old water heaters wear out.

Environmental Eliminating the natural gas systems for electric alternatives will lower the emission of greenhouse gases from building operations and provide a step forward in implementing the building electrification priorities of the ECAP.

Race & Equity*:* The project will have limited effects on overall racial equity in the City. The reduction in capital needs may allow for greater investment in frontline communities, and the reduction in harmful pollutants from the gas systems, particularly nitrogen oxide, will benefit the broader area. Five of the ten libraries that will initially receive new hot water heaters are in disadvantaged communities.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The City Council has independently reviewed and considered the Heat Pump installation project and finds and determines that it is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Sections 15268 (Ministerial Projects), 15183 (Projects Consistent

with a Community Plan, General Plan or Zoning), 15301(c) (Existing Facilities, Highways and Streets), 15302 (Replacement or Reconstruction), 15303 (Small Structures), 15304 (h) (minor alterations to land, and/or 15061 (b) (3) (No significant Effect on the Environment); and/or CEQA Guidelines section 15061 (b)(3) (common sense exemption), with each of the aforementioned provide a separate and independent basis for CEQA compliance.

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends City Council Adopt A Resolution Authorizing The City Administrator To Accept In-Kind Technical Assistance And No-cost Installation Of Heat Pump Hot Water Heaters In The Amount Of $74,516.70 From Willdan Group Inc. At Nine Municipal Library Buildings To Further The City's Climate, Electrification, And Equipment Modernization Goals And Adopting Appropriate California Environmental Quality Act (CEQA) Findings.

For questions regarding this report, please contact Joe DeVries, Deputy City Administrator, at (510) 238-3083.

Respectfully submitted,

Joe DeVries
Deputy City Administrator

Reviewed by:
Diane Tannenwald
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Prepared by:
Shayna Hirshfield-Gold, Climate Program Manager, City Administrator's Office

Attachments (3):
A: Government and K12 Heat Pump / Hot Water Electrification Program Informational Flyer
B: Recommendation Email from Alice LaPierre, City of Berkeley Building Scientist & Energy Efficiency Coordinator
C: Program Participation Agreement from Willdan