



City of Sunnyvale

Agenda Item

21-0036

Agenda Date: 2/25/2021

2021 COUNCIL STUDY ISSUE

NUMBER

CDD 20-04

TITLE Encourage Decarbonization Readiness During Electrical Upgrades

BACKGROUND

Lead Department: Community Development Department

Support Departments: Office of the City Manager

Office of the City Attorney

Environmental Services Department

Sponsor: Board/Commission: Sustainability Commission

History: 1 year ago: Deferred by Sustainability Commission

2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

The Sustainability Commission has identified an opportunity to increase ease of replacing gas appliances with electric appliances in existing buildings through early education and corresponding earlier upgrades in electrical systems. In existing buildings, replacing gas appliances with electric appliances may require the property owner to upgrade their existing electrical systems, including electrical panels, wiring, and conduits, which can be expensive and time-consuming. Educating property owners or incentivizing options for upgrading electrical systems at the point of remodeling, when they apply for building permits, may enable an easier switch to electrical appliances in the future.

What are the key elements of the Study?

This Study would evaluate what steps and resources the City would take to implement education, incentives, and policies to encourage the future electrification of gas appliances in existing residential or non-residential buildings. Study elements would include:

- Determining appropriate strategies and time points for educating owners on the benefits of switching to electrical appliances during building renovation or remodels,
- Examining policies to encourage the action of upsizing a building's electrical service panel during major upgrades to have sufficient size to accommodate a future all-electric building, and
- Identifying and consolidating information on available resources to facilitate ease of upgrades (e.g., logistical or design support) or incentives to offset costs (e.g., rebates).

Estimated years to complete study: 1 year

FISCAL IMPACT**Cost to Conduct Study**

Level of staff effort required (opportunity cost): Moderate
Funding Required for Non-Budgeted Costs: \$0
Funding Source: N/A

Cost to Implement Study Results

Implementation costs would be determined as part of the Study.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Sustainability Commission

STAFF RECOMMENDATION

Drop. This policy issue does not merit discussion at the 2021 Study Issues Workshop.

In 2019-2020, the City Council approved a phased Reach Code program to go beyond minimum state requirements for energy efficiency to encourage a transition to decarbonized buildings in a cost-effective manner. Phase 3 of the Reach Codes Program requires alterations to existing homes or non-residential buildings to convert to electrical appliances, and any additions to existing residential and non-residential buildings to be all-electric. To prepare for the implementation of Phase 3 (which will start when cost effectiveness studies on various sizes/scope of additions and alterations are completed), the Building Safety Division will provide outreach starting January 1, 2021. When an electrical permit is acquired to upsize the main electrical panel, homeowners will be encouraged to complete a tabulation to determine the feasibility of increasing the panel size to accommodate a fully electric home. This effort addresses the element of the proposed Study Issue focused on policy.

Further, Silicon Valley Clean Energy (SVCE) has two key initiatives under development that may guide the City in determining whether a policy approach may be appropriate as a Next Move in a subsequent CAP Game Plan:

- Building Decarbonization Joint Action Plan, which includes decarbonizing existing buildings as one of six cornerstone actions and will examine strategies to phase-out natural gas; and
- Streamlining Community-Wide Electrification Program, which examines key barriers and opportunities in permitting processes across municipalities to develop a Best Practices Guide for cities.

These initiatives address the element of the proposed Study Issue focused on policy.

In addition, the City's Climate Action Playbook includes Moves (specific actions) that address the elements of the proposed Study Issue focused on education and incentives:

- Move 2.C is to "Develop a program to accelerate the adoption of heat pump water heaters and space heaters." Silicon Valley Clean Energy's (SVCE) FutureFit program, launched in 2018 and currently in its second phase, offers rebates for upgrading to heat pump water heaters. This program includes rebates for upgrading associated electrical systems.

- Move 5.B is to “Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).” In 2020, SVCE launched a public-facing Customer Resource Center, called eHub. eHub allows customers to understand costs and benefits of newer all-electric technologies, learn about available incentives, and connect with vendors or installers for moving towards full electrification of existing buildings.

Staff recommends dropping this Study Issue as all elements of the proposed Study Issue are addressed through ongoing initiatives.

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