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Existing Building Electrification Plan - Frequently Asked Questions

1. What is the Existing Building Electrification Plan?

The Existing Building Electrification Plan is a framework to encourage and incentivize the electrification of homes and businesses in San José. It offers strategies to raise awareness about the benefits of using electric appliances and the negative health impacts of using gas; encourage the growth of high-quality building electrification jobs in San José; reduce housing and energy costs through building electrification programs; and increase access to clean and reliable energy.

2. Does this Draft Existing Building Electrification Plan require the mandatory elimination of natural gas equipment in San José buildings and homes by 2030?

No. The Draft Plan does not propose any mandates to switch out existing natural gas for electric equipment.

In November 2021, the City Council passed a [resolution](#) for San José to strive for a goal of carbon neutrality by 2030. The Draft Plan is the beginning of a feasibility plan for the elimination of natural gas emissions in all existing buildings. In May 2022, City Council will consider whether to continue with the study of building electrification and develop an implementation plan. If the Council votes to move forward with the Existing Building Electrification Plan, there will be further public hearings to discuss policy options and the timing of any future policies.

If the City does consider mandates related to building electrification in the future, it will engage with the public and stakeholders and provide opportunities for input.

3. How does going electric benefit a household?

There are many benefits to switching homes from gas to electric. Modern electric appliances are safer and better for indoor air quality. They do not emit carbon monoxide or nitrous oxides, as natural gas appliances do. All-electric homes can also help lower

energy bills, according to a recent report by Energy + Environmental Economics (E3) titled [Residential Building Electrification in California](#).

All-electric homes also reduce greenhouse gas emissions, especially when powered by carbon-free electricity from [San José Clean Energy](#).

4. I just put in a new natural gas water heater/stovetop/dryer/furnace. Does the Draft Existing Building Electrification Plan require me to replace it by 2030?

No. There are no proposed mandates in the Draft Plan to switch out existing natural gas for electric equipment.

Bay Area Air Quality Management District is [proposing revised rules](#)

5. What community outreach has been done to let people know about the Draft Existing Building Electrification Plan and receive their input?

There has been significant community outreach and engagement regarding the DraftPlan. The City's engagement efforts have included:

- Fifteen meetings over 7 months with our community-based organization partners, ICAN and Veggielution, to ensure the City included the perspectives of Spanish- and Vietnamese-speaking residents and communities that are most vulnerable to poor air quality and other climate impacts
- Individual meetings with more than 40 community-based organizations, labor organizations, environmental organizations, nonprofits and housing organizations
- Three community forums with community-based organizations, labor organizations and housing organizations
- Five virtual public information sessions to share the development of the DraftPlan with the broader community. Sessions were promoted via social media (Facebook, Twitter, Instagram and Nextdoor) and emails to more than 450 stakeholders, including neighborhood associations.

6. Are fully electric homes more heavily impacted by PG&E power outages?

Not necessarily. Technological advances are enabling homeowners to make their all-electric homes more resilient and carbon-free.

Moving away from natural gas will eventually decrease the need for planned safety power outages and increase the grid's capacity and resiliency in the face of emergencies, power shutoffs, or rolling blackouts. Gas infrastructure and appliances are not immune from power shutoffs, nor do they offer safe operation during emergencies or blackouts.

Gas infrastructure is particularly vulnerable to fires or earthquakes, with gas pipe explosions being the leading cause of post-earthquake fires.

All-electric appliances can be safely set up to use a backup power source such as generators or solar-powered batteries. Future technology trends -- including the falling price of lithium-ion batteries, the capability of leveraging an electric vehicle battery as a backup power source, and smart electrical panels to distribute power to critical loads in the home -- will increasingly allow for backup electric power that is safer and more reliable than gas sources. San José Clean Energy is currently analyzing alternatives to enhance future grid capacity and resiliency in San José, including incorporation of microgrids.

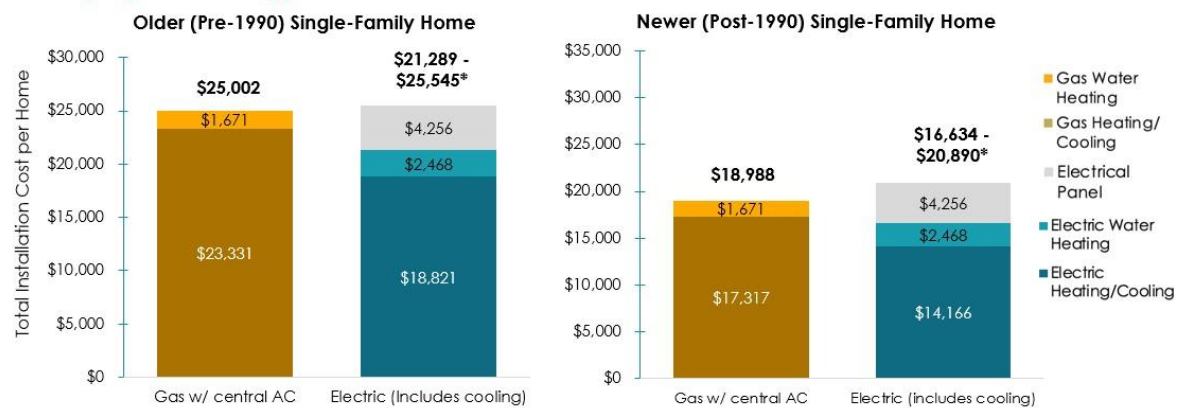
7. If I choose to transition from natural gas to electricity, how much would that cost?

Homeowners can take advantage of existing [rebates and incentives](#) to electrify their homes and complete electric panel upgrades. Additional incentives are expected to become available in coming years through local, state and federal programs.

For single-family homes, installing an electric space heating/cooling system and water heater (without an electric panel upgrade) is estimated to cost between 14%-17% less when compared with choosing a gas furnace with central air conditioning and a gas water heater.

Installation Costs for Priority Systems | Single-Family Homes with Central A/C

Assuming a single-family home installs central cooling, the installation cost for priority systems (HVAC and hot water), are comparable to a retrofit to new gas equipment plus central cooling. Priority systems make up the majority of the energy use and installation costs.



*Note: The higher end of the range includes the cost of an electric panel upgrade. For homes that currently use gas for heating and hot water, electrifying both systems likely requires upgrading the central electrical panel. However, this may not be necessary if one of the two is already electric and should be determined with a licensed contractor.

Electric appliances also typically reduce total home energy costs. Most single-family homes in San José would see a cost savings of up to \$1,000 per year as a result of whole home electrification plus solar.

Focusing on the biggest gas uses in a single-family home (space and water heating), it could cost between approximately \$2,500 (hot water only) and \$22,000 (hot water plus HVAC system) to electrify a home, depending on the extent of the upgrade. This does not include a panel upgrade (estimated at around \$4,300) as some single-family homes in San José were built with adequate capacity for full home electrification or have already upgraded their panel.

Please email climatesmart@sanjoseca.gov with any additional questions.