
Electrification FAQs

1. What is building electrification and why is it important?

Building electrification refers to the phase out of gas appliances, going with clean, efficient electric heaters and appliances when they are replaced. This helps reduce one of the largest sources of air pollution, as well as greenhouse gas emissions in order to address climate change.

2. Is the electricity on the grid “clean”?

Peninsula Clean Energy ([PCE](#)), Silicon Valley Clean Energy ([SVCE](#)), and the City of Palo Alto Utility serve 100% carbon-free power to all of San Mateo County and most of Santa Clara County.

3. How reliable is the electric grid as compared to natural gas?

The natural gas grid and electric grid both go down on occasion. In fact, during California’s primary natural disaster events, wildfires and earthquakes, utilities are supposed to turn the gas off. Also, most modern gas appliances depend on electricity to operate, and therefore cannot be used during an electric power outage. If 100% reliability is a goal for your home or project, electrification with battery and solar backup is the way to get there.

4. How can I stay resilient with all-electric?

The best way to ensure that you have power, even when the power grid is down, is to install a home battery system, coupled with solar panels. This applies to most modern gas appliances as well, because they depend on electricity to operate.

5. Is there enough electricity in the grid?

According to Jan Pepper, CEO of San Mateo County’s electricity provider, Peninsula Clean Energy (PCE), “(T)his amount of increase is definitely not going to stress the electric grid.” Electric Vehicles use far more electric power than home heating and appliances. Electric power providers are already planning to supply more electricity in the future to account for more electrification.

6. Aren’t electric rates going up?

Yes, they are, and gas rates are also going up and faster than electric rates. As more people transition to electricity, people still using gas will pay more. One way to keep utility bills down is to add rooftop solar and complete energy-efficiency upgrades like insulation.

7. How long will it take for all-electric home upgrades to pay for themselves?

It will vary a lot, depending on your home but you’ll enjoy immediate comfort benefits. A well-designed all-electric home upgrade can pay for itself in 5 to 10 years. Also, starting in January electric appliances can be financed with a zero-interest ten-year loan from Peninsula Clean Energy.

8. How will low-income residents afford electric upgrades?

PCE has launched a low-income turnkey electrification program that will provide full service replacements of gas appliances for customers who are on bill assistance programs, such as CARE, and could be a model for others to follow. Some companies, such as [BlocPower](#), also offer extremely low cost and subsidized programs for electrification of affordable housing.

9. Is affordable financing available for electrification?

PCE will begin offering zero interest loans for new electric heat pump heaters and water heaters, in January 2022 through a new on-bill financing program; and hopefully other utilities will soon offer this as well. This allows households to avoid the upfront costs of electrification, spreading them out over time. A credit check is not required. Customers throughout the Bay Area can also access free assistance for energy saving strategies from the HomeIntel Program.

10. Will new electric appliances require upgrades to the electrical panel?

Thoughtful equipment choices make it possible to meet all our needs on a common 100-amp electric panel, without sacrificing convenience or comfort. Also new load-sharing devices allow appliances like a dryer and an EV charger to safely share circuits. See examples and affordable solutions in this [electric home design guide](#). A new bill, SB 68 (Becker) if approved this year, requires the state Energy Commission to provide educational materials about ways to electrify without upsizing the service panel.

11. How can i find a good contractor?

The [Clean Energy Connection](#) has a searchable online database of California contractors who have expertise with electric appliances, positive customer references, and at least 2.5 Stars on Yelp. BayRen also has a contractor list [here](#). Several local contractors offer full service and highly skilled whole-home electrification, such as [ElectrifyMyHome](#) and [EmeraldECO](#). Additional resources can be found from PCE's [All Electric Home website](#); and also through the [Electric Home Ambassador Program](#), which matches residents who are interested in going electric with an experienced electric home-owner.

12. How will I barbecue with electric appliances?

What about my outdoor firepit?

Propane gas will always be an outdoor solution. Many regions of the U.S. don't have gas service at all.

13. Will I have to replace all my pots and pans?

Standard glass top electric cooking stoves do not require any specialized cookware. If you switch to electric induction, you can continue using all your cookware with a magnetic disk ("heat diffuser") to ensure that the induction works well. You can try out an induction cooktop through one of these loaner programs.

14. How can a heater also be an air conditioner?

See [this short video](#) on how a heat pump system works