Public Comment for Item 6: Review Existing Building Electrification Incentives
- Suzanne Henderson Emerson, San Carlos Green
- Diane Bailey, Campaign for Fossil Free Buildings in Silicon Valley
- Linda Hutchins-Knowles, Mothers Out Front

Friday, September 11, 2020 3:32 PM

Subject: Question for 9/14/2020 PCE Executive Committee Meeting, item 5: Building Electrification Consumer Information?

Hello Ms. Bartoletti,

I have a question for the upcoming PCE Executive Committee meeting, regarding Item 5, Building Electrification.

Is PCE considering developing or linking to consumer information and FAQs regarding heat pump water heaters, heat pumps for heating and cooling, and induction stoves? In response to the recent heat wave, people have been making the decision to add AC to their gas furnace – and we don’t have a good FAQ page to send them to for information about installing a heat pump instead. We are having to come up with our own heat pump FAQ pages -- see attached.

I understand the recent Building Electrification Awareness Program includes development of collateral materials regarding induction cooktops, for distribution at cooking demonstration programs. Unclear when we will be able to hold such events, it would be quite useful to have the written materials available on the PCE web site sooner rather than later, and to have information available about heat pumps and heat pump water heaters as well.

Thank you for considering this issue.

Suzanne Henderson Emerson

San Carlos Green

Attachments (at the end of the document):
Heat Pump Flier
Induction Cooking Flier
Sunday, September 13, 2020 5:47 PM

Subject: FFBSV Recommendations for Existing Building Electrification Incentives (ExCom Agenda Item #6)

Dear Chair Aalfs, Vice-Chair DeGolia, and Board Members,

I’m writing in regard to the Executive Committee meeting item # 6 tomorrow, Review Existing Building Electrification Incentives.

This is an important program that will help us transition away from Fossil Gas throughout the County and we appreciate your thoughtful debate about how best to use limited funds. Several colleagues have written with important suggestions that I’d like to support & reiterate because they have been voiced by many others within the Campaign for Fossil Free Buildings in Silicon Valley (https://fossilfreebuildings.org/).

- Regarding, PCE’s proposed additional incentives for heat pumps layered on BayREN’s current Home Plus rebate, it would be best to allow flexibility for incentives for not only heat pump water heating, but also heat pump heating/cooling. As we face many more deadly heatwaves due to climate change, helping people afford to replace their gas furnace with a heat pump heater that also offers cooling can provide life-saving cooling during extreme heat. This is a significant climate justice and equity issue, since many residents cannot afford AC, and these residents are more likely to live in urban heat islands, where temperatures soar even higher. In addition, opening the rebate to heat pump heaters/AC helps home and building owners begin electrifying their major gas uses, preventing further investment in more gas devices, which is a priority if we hope to end our fossil fuel dependency in time to assure a climate stable future.

- We encourage PCE to consider developing or linking to consumer information and FAQs regarding heat pump water heaters, heat pumps for heating and cooling, and induction stoves. In response to the recent heat wave, people have been making the decision to add AC to their gas furnace – and we don’t have a good FAQ page to send them to for information about installing a heat pump instead. While many of our advocacy organization have info sheets, as do other entities such as SVCE’s E-hub, SMUD and the CA Building Decarbonization Coalition, the information may be most useful if offered directly by PCE.

Thank you for considering these comments.

Warm regards,

Diane Bailey, on behalf of the Campaign for Fossil Free Buildings in Silicon Valley
Monday, September 14, 2020 8:00 AM

Subject: Re: [MOFSV-L] Mothers Out Front’s input on ExCom Agenda Item #6

Dear Peninsula Clean Energy Executive Committee Chair Jeff Aalfs, Vice-Chair Rick DeGolia, and Board Members,

As you meet tomorrow to review Existing Building Electrification Incentives, we at Mothers Out Front Silicon Valley wish to express our appreciation for your leadership in helping our region transition away from climate-distabilizing and polluting fossil gas to protect public health and ensure a livable climate for current and future generations.

On behalf of our 1900 local supporters, we also wish to encourage you to extend the support you offer to include incentives for not just heat pump water heating, but also for heat pump cooling and heating.

As we have witnessed in the past month, the number of days of extreme heat we are experiencing is increasing, putting at risk the health of vulnerable populations. Extreme heat is the leading cause of weather-related deaths in the U.S., especially impacting the very young, the very old, and those with pre-existing health conditions. However, those most at risk are often the least able to afford air conditioning, raising concerns about equity and resilience.

By extending the rebate you currently offer for heat pump water heaters to heat pump space heaters/coolers, you will not only help reduce greenhouse gas emissions, but also enable residents to afford life-saving cooling during extreme heat events. And you will make it less likely that people will simply purchase AC units in addition to their gas furnaces and more likely that they will replace their gas furnace with a heat pump that will provide both heating and cooling.

Because many residents are not familiar with the latest heat pump and induction stove technology, we also encourage you to provide easy-to-access resources and FAQs on your website that can help people understand the benefits of these super efficient electric appliances and guide them should they choose to purchase one.

Thank you for considering these recommendations.

With appreciation,

Linda Hutchins-Knowles, on behalf of Mothers Out Front Silicon Valley

Linda Hutchins-Knowles, California Senior Organizer
Mothers Out Front
Pronouns: She/her/hers
www.mothersoutfront.org
Heat Pump to Heat and Cool Your Home

Energy Efficient Heating + Cooling

What is an electric heat pump?
An electric heat pump is a single unit that both heats and cools your home. A heat pump is the most efficient heating and cooling system available today because it provides more than one unit of heat for each unit of energy it consumes.

If it cools and heats, why do they call it a heat pump?
Simple -- it pumps heat. In summer, it moves heat from inside your home to the outside. In winter, it moves heat from the air outside to inside your home. This is done using refrigerant that is pumped by the compressor through the indoor and outdoor coils – just like a refrigerator or air conditioning unit, but it works in both directions.

Would I need larger ductwork?
A heat pump uses the same sized ductwork as a typical gas furnace/central air conditioning system. If you have an existing home with a gas furnace, you can replace the furnace with a heat pump, install the outside unit that looks like an air conditioning compressor, and you’re good to go.
Would I need to put equipment on the interior wall? Would I need to install ducts?

There are 3 main types of heat pumps. One type looks like a furnace air handler, and fits right where a furnace otherwise goes, attaching to a traditional duct and register system. Another type doesn’t use ducts, and has a single-room heat pump cassette attached to a wall – you may have seen those retrofitted into overseas hotels and stores. There are also small heat pump systems that can fit into attic space to serve just a few rooms, without being visible on a wall.

Is a Heat Pump more expensive or less expensive than a furnace plus air conditioning?

Switching from gas to a two-stage or variable heat pump system increases energy efficiency, which results in lower energy costs. Purchasing a single heat pump instead of separate furnace and AC units is generally a cost savings as well.

Are there any safety advantages?

Installing a heat pump instead of gas furnace removes possible carbon monoxide hazards in the air, creating a safer home. And eliminating gas use in the home decreases risks of a house fire or gas line rupture during an earthquake.

How would this affect my greenhouse gas emissions?

In the average Northern California home equipped with gas appliances, about 40% of a home’s gas use is for their furnace. The Northern California electricity supply includes a substantial and growing proportion of renewable energy – there are no coal-fired power plants in Northern California, and only 15% of the Northern California-produced electricity is from burning natural gas.1 Replacing your gas furnace with an electric heat pump will substantially reduce your home’s emissions of greenhouse gases.

**Induction Cooking**

**How it works**

![Gas vs Induction](image)

- **Gas**
- **Induction**
- **Ceramic top plate**
- **High frequency current**
- Surface remains cool until it comes in contact with ferrous metal.

**Benefits**

- **Boils water 2X FASTER**
- **Twice as efficient**
- **Low consistent heat**
- **Safest**
  - No open flames
- **Easy to clean**
- **Keeps your home cooler**

**Fast temperature response**

**You're in control**

Precise, digital controls take the guesswork out of cooking.

**Boiling Time, 1.4 gallons water**

![Boiling Time Graph](image)

- **Resistance Coil**
- **Resistance Ceramic**
- **Induction Unit**
- **Gas Burner**
- **Target temp**

**Better for your health**

**Better for the environment** Reduces your CO₂ footprint
Customer research
SMUD customer panel: How would you rate your impression of induction cooking before and after trying the induction cooktop?

Before
- Negative
- 21%

After
- Negative
- 91%

Sleek Design

Graphics from SMUD; San Carlos Green