

00:16:44 Sherry Zhu / SPUR Public Programs: Learn more about becoming a SPUR member here: spur.org/join

00:17:13 Sherry Zhu / SPUR Public Programs: Join us for next week's digital discourse with Senator Josh Becker! <https://www.spur.org/events/2023-03-09/conversation-senator-josh-becker-climate-change-equity-and-californias>

00:37:33 Sherry Zhu / SPUR Public Programs: Have a question about what's been presented so far? Add it to the Q&A box so we can answer it later!

00:38:51 Dr. Janice Kirsch: Came in a few minutes late.

Will recording be available for attendees?

00:40:07 Sherry Zhu / SPUR Public Programs: Yes! A recording will be available on the event webpage in a couple days. Registrants will receive an email when it is uploaded.

00:42:02 Thomas Metz: I strongly support this work. In fact I am in the process of decarbonizing my rent-controlled multifamily building. It's an old building so this requires upgrading the electric service to the building. Unfortunately, it took PG&E a year to upgrade the electric service to the building. This also requires upgrading all the wiring in an individual apartment, which can only be done when an apartment is vacant. Also unfortunately, this is at odds with the proposed vacancy tax for empty apartments. Is someone addressing these issues?

00:44:06 Sarah Boudreau: My question is also about electric readiness retrofits. Is someone able to speak to how PG&E will be able to upgrade each building on this timeline? Will the process at PG&E change? For example I am trying to go electric at my 3-unit condo building and before even being able to buy the electrical appliances themselves we have to go through an \$80,000 panel and service upgrade, which is taking 2-3 years, even for someone with time, money, energy, desire to do this, and knowledge of the subject. Is there a plan for doing this upgrade at scale more efficiently? Are you able to also share the research on not needing an upgrade, or any current incentives for upgrades or examples of the utility company paying for the upgrade?

00:45:22 Tom Kabat: @Thomas, this set of guidelines may give ideas for avoiding the upsizing costs and delays. <https://www.peninsulacleanenergy.com/wp-content/uploads/2023/02/Design-guidelines-for-home-electrification-v021023.pdf>

00:45:49 Anthony Eulo: and that homeowner now has air conditioning too

00:46:41 Felicia Federico: Recommend encouraging people to plan ahead and not wait until water heater has ceased to function, because at that point, the additional research, potential need to add a 240V outlet (which means needing an electrician as well as a plumber), and wrangling with contractors, may be too much of a barrier to overcome when someone has no hot water to shower, wash clothes or dishes.

00:47:34 Tom Kabat: @ Sarah, This retrofit guide may help <https://www.redwoodenergy.net/research/a-pocket-guide-to-all-electric-retrofits-of-single-family-homes>

00:49:32 Thomas Metz: I have already upgraded the electric service. It was definitely necessary. Please provide a link to rebates, etc.

00:53:41 Ruth Callahan: The CARB regulations say no residential dwellings within 100 meters (330ft) from a gas station Why is BAAQMD not stopping San Jose City from building 100% affordable housing dev within 21 feet of a gas station at 1371 Kooser Road?

00:54:38 Julie Lindow: Two services that make it easy to figure out the financial incentives: <https://switchison.org/> and <https://www.quitcarbon.com/> We are working with QuitCarbon and love them! They make the plan and find the rebates and contractors for you!

00:55:23 Thomas Metz: Thank you, Julie.

00:55:27 Ruth Callahan: The proforma costs that BAAQMD are using for conversion to electric for SFHomeowners and apartments are not factual or based on real world bids. I have seen cost that are based on 2019 costs?

00:55:56 Tom Kabat: @Sarah, PG&E also offers this recoded video class on avoiding electric panel upsizing.
<https://pge.docebosaas.com/learn/course/external/view/elearning/1206/home-electrification-retrofits-without-upsizing-the-electric-panel-previously-recorded>

00:56:25 Ruth Callahan: Heat Pumps are not compatible with pace makers- they are not able to be installed in apartments why are you pushing that product?

00:57:59 Ruth Callahan: California has a gas shortage deliver problem and gas runs Cali's electrical power plants How do you propose to supply this electricity without gas?? Please respond

00:58:56 Tom Kabat: @ Ruth, Heat pumps are two way air conditioners that can cool a building or run in reverse to warm a building in the winter. I'm not a doctor but I think air conditioners and and heat pumps are comparable with pace makers.

00:59:42 Ruth Callahan: current research is on the web pacemakers cant be within 200 feet of them without software mishaps

01:00:44 Julie Lindow: Heat pumps are compatible with pace makers. Induction cooktops may not be. We need more research so for now we do not recommend induction cooktops if you have a pacemaker. NEW electric stoves FAR better than the coiled versions and a great option.

01:01:28 Anthony Eulo: While some people "love" their gas stove, emotions are much lower about heating appliances.

01:02:58 Sarah Boudreau: @ Ruth, we just installed 3 heat pumps in our apartment building - one per unit. It's definitely possible

01:04:00 Julie Lindow: Always ask your own physician if you have concerns about pace makers and interances. The American Heart Association is another good source.

01:04:38 Tom Kabat: @ Ruth, using efficient heat pumps (300% efficient by getting two thirds of their heat from the air passing through the yard and one third from the electric grid) uses less gas than a gas furnace that needs 100% methane gas.

01:07:12 Anthony Eulo: Water heater loaner programs will be really valuable. Pro tip is to prewire early before the gas appliance fails.

01:07:46 Felicia Federico: Loner programs are a great idea!

01:08:05 Sarah Boudreau: Can someone send around the link to the action items on the vote from Melissa's slide?

01:08:07 Tom Kabat: I've installed the new 120V heat pump water heater as an emergency replacement and the client is very happy with.

01:08:09 Ruth Callahan: Are they free

01:10:01 Anthony Eulo: Many organizations are looking at free loaner programs.

01:10:03 Harper (SPUR): My tack-on comment to Laura's on permit streamlining is that there has been phenomenal and precedence work on permit streamlining from the rooftop solar industry. While there are some nuances with clean appliances, there should not be any monumental hurdles to permit streamlining challenges we are seeing now.

01:10:43 Julie Lindow: Take ACTION by 3/14: Call or Write to support clean, healthier air: https://docs.google.com/document/d/15tOGcldkdOx3HAwnPW_G8ATILtVtcbWSo-W2eSr89eI/mobilebasic

01:12:10 Julie Lindow: Every energy provider in the Bay Area has told us that the grid will be ready. As speakers have pointed out, we will have years to prepare and those preparations are already well underway.

01:13:01 Dr. Janice Kirsch: only a certain subset of people with pacemakers may be at risk for interference by induction cooktops: those with left-sided unipolar pacers standing very close to hob.

Even they can still be in the same room.

<https://academic.oup.com/europace/article/8/5/377/460579>

01:13:25 Julie Lindow: Get the facts here! <https://www.bayareacleanair.com/faqs>

01:13:53 Harper (SPUR): NV5 report on Electrical Service Upgrades
San Mateo County Office Of Sustainability Study of Costs in Single-Family Homes
Redwood Energy Pocket Guides to Multifamily and Single-Family Retrofits

01:13:54 Julie Lindow: Thank you Dr. Kirsch!