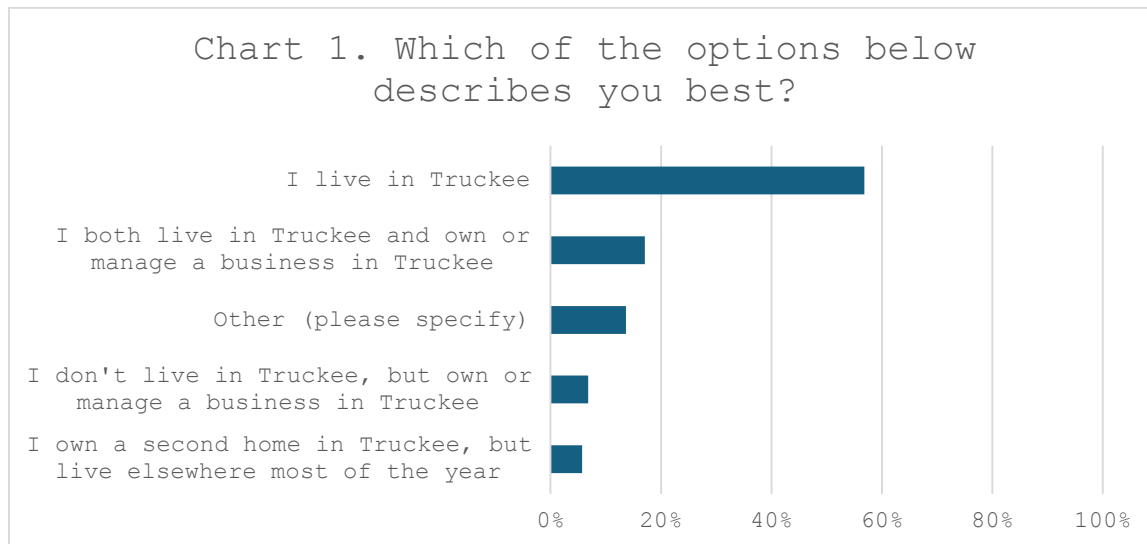


## Building Energy Use Community Survey

### Summary of Responses

Keep Truckee Green staff developed a community survey on building energy use that was open for responses in August 2024. The survey was designed to collect information about community members understanding of and interest in building decarbonization and assess potential opportunities and barriers to implementation. This survey was distributed via social media, the Town's newsletter, the Keep Truckee Green website, and in-person via QR code at the Keep Truckee Green booth at Truckee Thursdays. The majority of responses (66%) were collected from links on the Town's and KTG's social media posts. The survey was available in both English and Spanish, though only English-language responses were received.

Most respondents were Truckee residents, with smaller percentages of second homeowners or business owners that primarily lived elsewhere. Of those selecting "Other," most indicated they were residents of a nearby community and/or worked in Truckee.



Respondents were asked to self-assess their knowledge of building decarbonization on a scale from "Beginner" to "Expert." The average ranking was 3.3 on a scale of one to five. Only 21% of respondents indicated a relatively low level of expertise. This suggests that while there are definitely some members of the community that could benefit from a broad education on building decarbonization, this is not likely a primary barrier for most people.

Respondents were shown a diagram of the types of decarbonization measures that could be implemented in a single-family home and asked to indicate which they would consider if they were doing home renovations or replacing appliances.

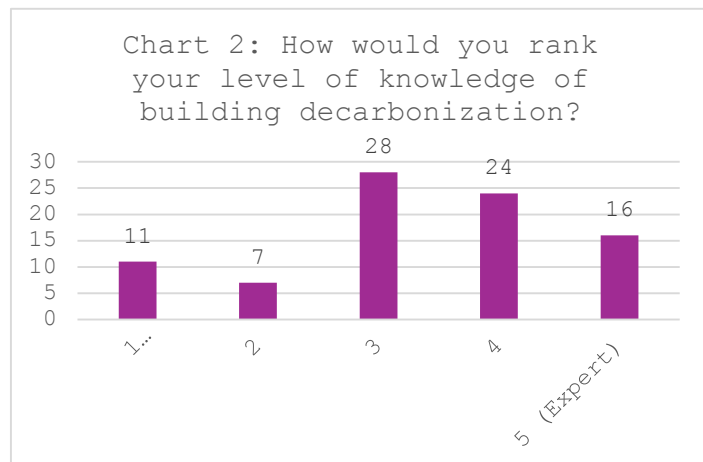
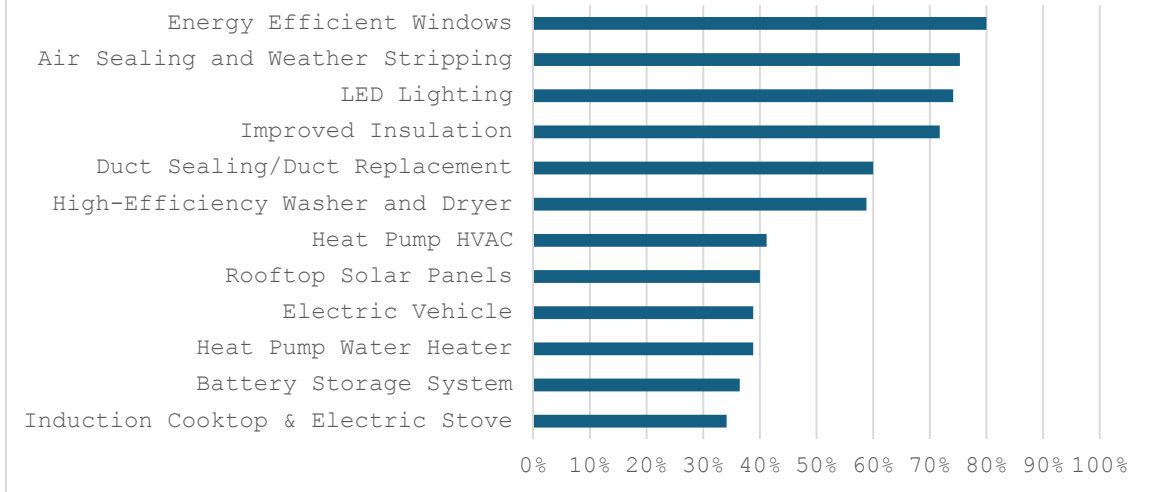


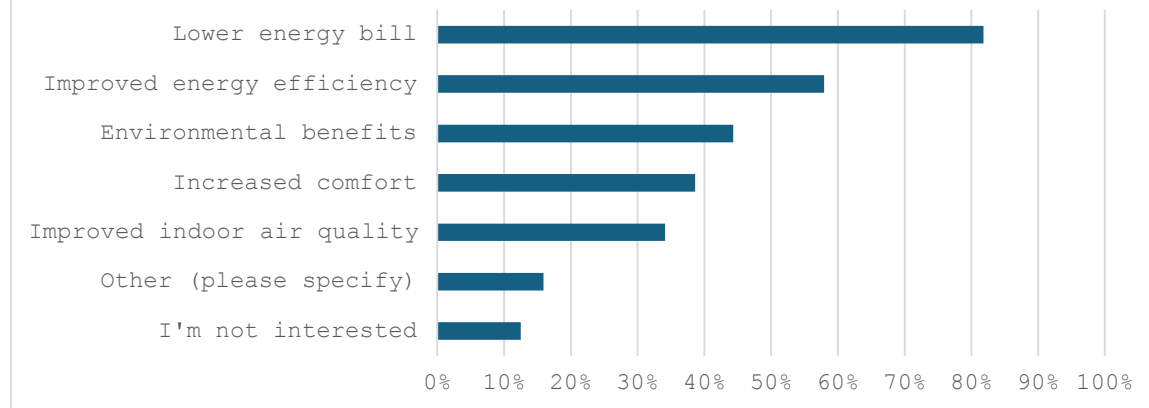
Chart 3. Which measures would you consider if you were doing home renovations or replacing appliances?



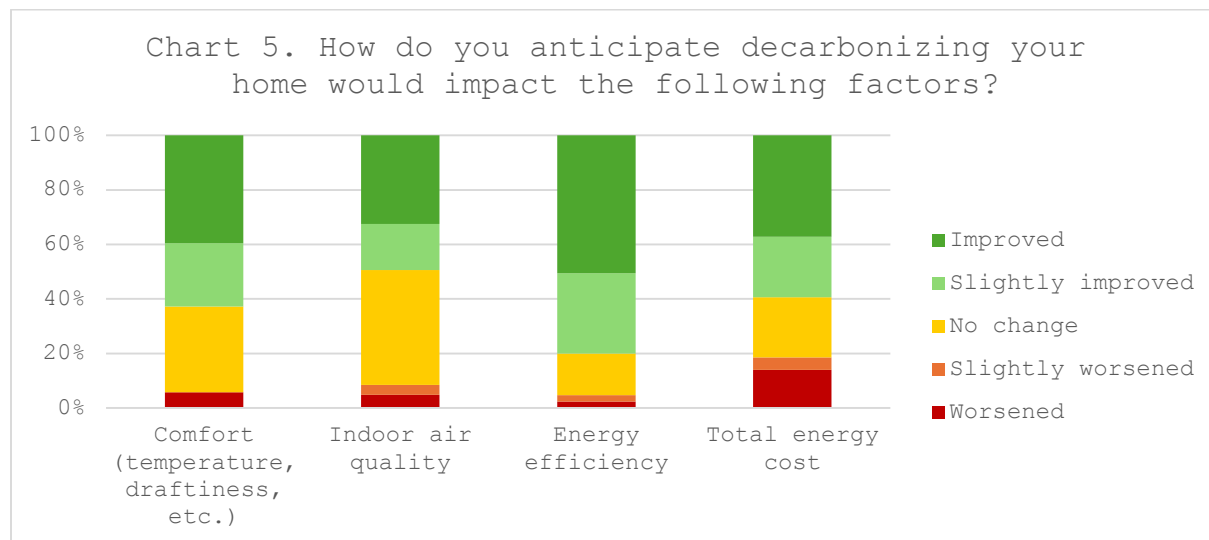
Overall, there was much higher interest in weatherization and energy efficiency measures than electrification measures. Many of the comments indicated an interest in efficiency measures that could save money, but viewed the other measures as prohibitively expensive, impractical in Truckee's climate, and/or reducing resilience to power outages. A minority of respondents were still potentially interested in implementing some types of electrification measures such as heat pump space or water heating and induction cooktops, particularly if concerns over cost could be addressed.

When asked what would motivate them to decarbonize their home the most, lower energy bills was overwhelmingly the most popular answer. Less than half of respondents (44%) stated that environmental benefits would be a motivating factor for decarbonizing their home.

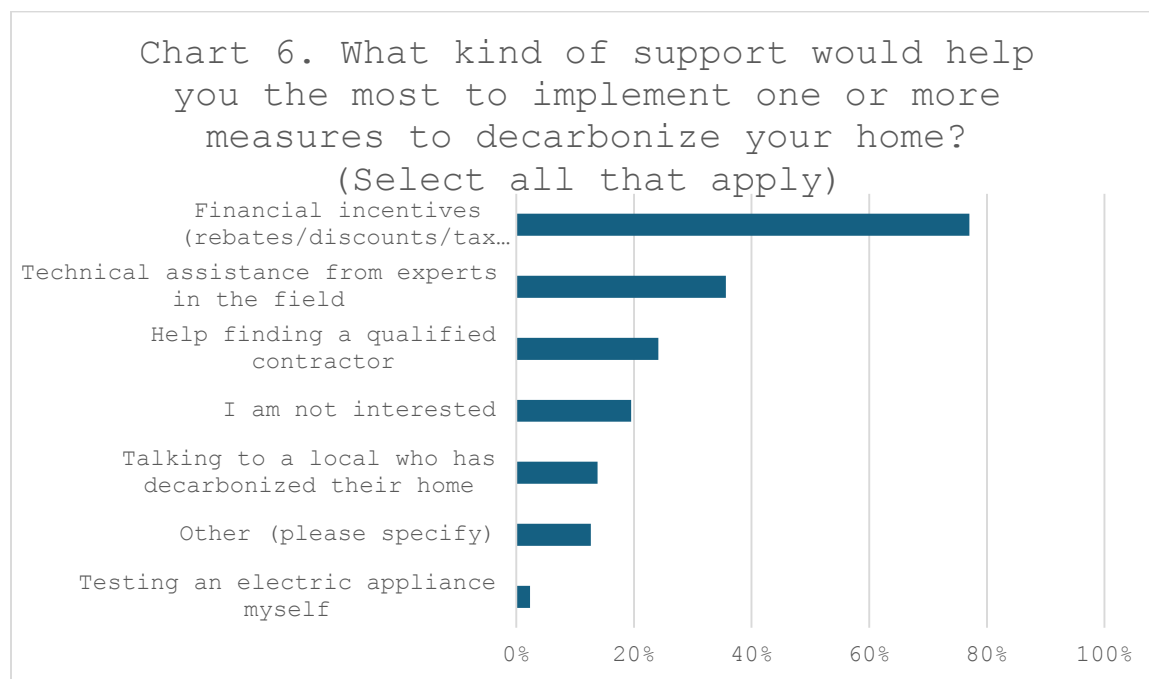
Chart 4. What would motivate you to decarbonize your home the most? (Select all that apply)



Of the 14 respondents selecting “Other,” many expressed concerns over cost, and some noted that financial incentives or other strategies to address the cost of decarbonization measure would be a motivating factor. Several respondents also mentioned concern over power outages.

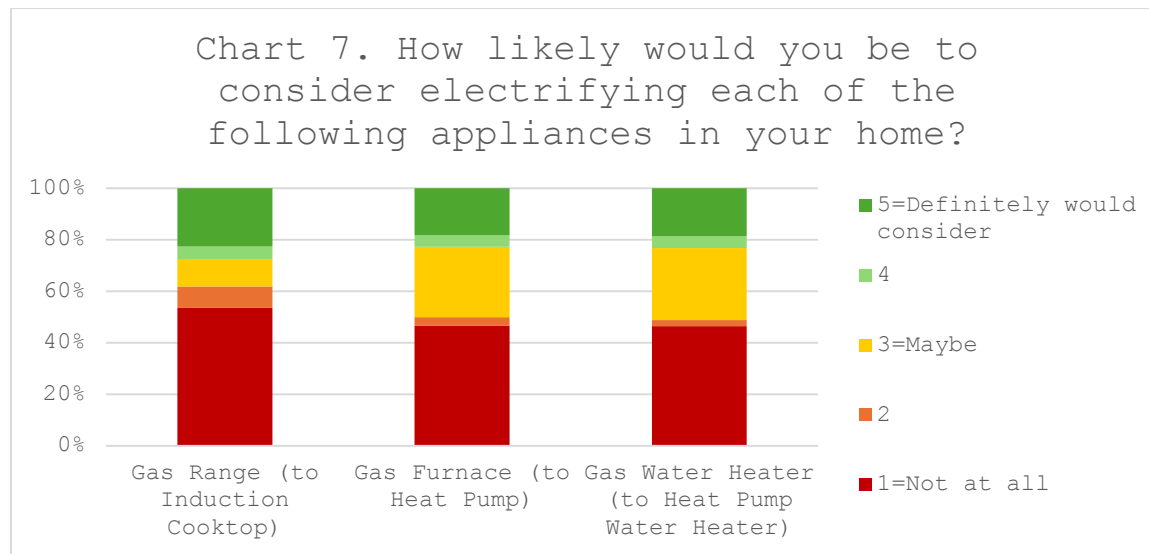


When asked how they anticipated decarbonizing their home would impact factors like comfort, indoor air quality, energy efficiency, and total energy cost, most respondents expected these factors would be improved to some degree. Respondents were most skeptical of the impact on total energy cost, with close to 20% of respondents expecting it to be worsened to some degree.



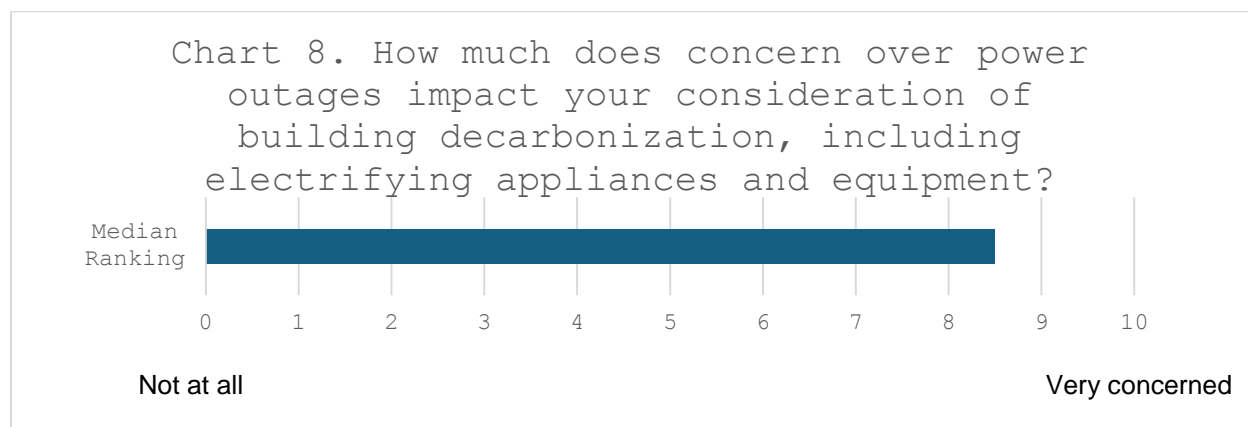
Most respondents (77%) stated that financial incentives would be the most effective type of support for implementation of building decarbonization measures. Technical assistance or help finding a qualified contractor were also common responses. Notably, nearly 20% of respondents

indicated they were not interested. A few respondents (about 3%) were opposed to financial incentives paid for with tax dollars or other public/ratepayer funds.



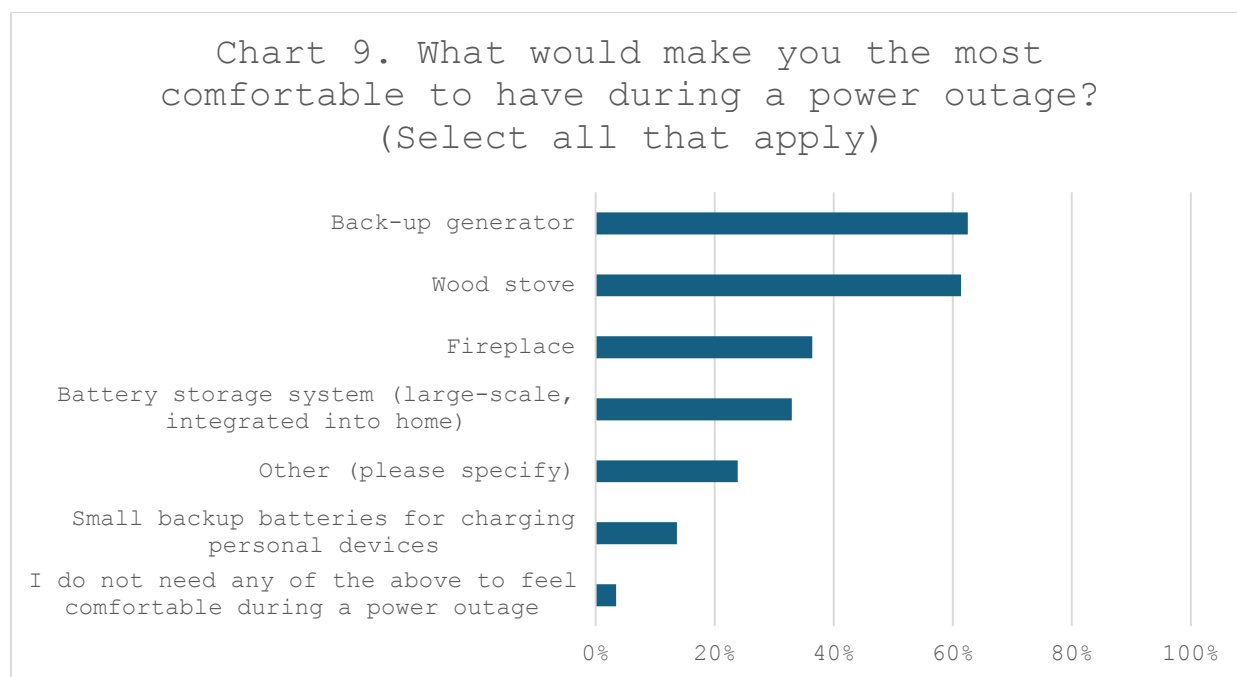
Overall, interest in electrifying existing gas equipment was low among survey respondents, with roughly half of respondents indicating no interest in electrifying heating, water heating, or cooking equipment. However, around 20% of respondents stated they “Definitely would consider” these electrification measures, indicating that with the right supportive programs, the Town could catalyze early adoption of electrification. Interest was lowest for converting gas range cooktops to induction cooktops, with numerous comments expressing that gas range cooktops were preferred by the respondent for cooking in general and provided a key source of resilience in a power outage.

Concern over power outages is a major factor in consideration of building decarbonization. When asked how much this concern impacted their consideration of building decarbonization on a scale of 0 (Not at all) to 10 (Very concerned), the median ranking was 8.5. Only 20% of respondents ranked their level of concern at less than a 5 out of 10.



When asked what they would need to feel comfortable during a power outage, most respondents indicated they would want both a back-up generator and wood stove. Many of those selecting “Other” indicated they already rely on most or all of these resilience strategies. Notably, several

respondents indicated that a gas range cooktop was an important resource for them during power outages.



When asked why they selected those resilience strategies, a common theme was the need to have systems that are resilient and not fully reliant on electricity due to power outages in both summer and winter. Most respondents expressed a particular unwillingness to rely on electricity for heat in case of a winter power outage.

Staff analyzed the seven short answer/open feedback questions to identify common themes, which are listed below along with the approximate percentage of comments that addressed each theme:

- Cost Concerns (40%): Many comments emphasize that the costs associated with decarbonization, such as heat pumps and other upgrades (mostly electrification related, not weatherization) are a significant barrier
- Skepticism Towards Electric Solutions (35%): Many respondents do not think electric solutions like heat pumps or EVs are reliable in Truckee's climate, due to cold weather and power outages
- Preference for Gas Appliances (30%): Respondents see gas appliances as much more reliable and better performing than electric appliances, particularly stoves and heaters.
- Opposition to Regulatory Approach (25%): Several comments express frustration with a regulatory approach to decarbonization, advocating for personal choice and market-driven solutions instead.
- Existing Infrastructure Concerns (20%): Respondents were concerned about how well the electrical infrastructure would be able to support an increase in electricity demand.

- Environmental Considerations (15%): Some people expressed concern about the environmental impacts of electric vehicles and equipment and questioned whether decarbonization would actually lower emissions.
- Desire for Incentives (15%): Many respondents wanted financial incentives or subsidies to make decarbonization more affordable.
- Mixed Experiences with Current Solutions (10%): Some respondents have had positive experiences with electric appliances and others have been dissatisfied or knew of someone who did not have a good experience with them, such as not having adequate heating during a power outage.
- Call for Alternative Solutions (10%): Some comments suggest exploring passive measures (e.g., shade structures, mature trees) as additional or alternative decarbonization strategies.

Overall, respondents were highly concerned about the cost of building decarbonization measures and emphasized the need for financial incentives to make these measures more accessible. Concern over relying on electric equipment in power outages, particularly for heating and cooking, is clearly a large factor in resistance to electrifying gas equipment in Truckee. While there was broad support for weatherization and efficiency measures, many community members are clearly hesitant to embrace building electrification measures out of concern they are not a good fit for Truckee's cold winter climate.

Based on this feedback, Town staff have the following recommendations for the Town's building decarbonization strategy:

1. In the near-term, focus on voluntary decarbonization programs and supporting early adopters of electrification measures.
2. Develop equitable financing strategies to address the upfront cost of decarbonization measures and ensure proposed measures reduce energy bills or are cost-neutral.
3. Invest in an energy resilience strategy to identify policies and programs to improve the resilience of Truckee homes and businesses, both all-electric and mixed-fuel.
4. Continue to invest in real-world, local case studies of the impacts of electrification through programs such as the CTA Building Decarbonization pilot program.