

Community Strategy for Equitable Home Electrification

February 2024



Utah Clean Energy received financial support for this project from the U.S. EPA under an Assistance Agreement.









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About this project

Utah Clean Energy received financial support for this project from the U.S. Environmental Protection Agency under an Assistance Agreement in collaboration with the <u>Environmental Justice</u> <u>Collaborative Problem-Solving (EJCPS) Cooperative Agreement Program</u>. This program provides financial assistance to eligible organizations working to address local environmental or public health issues in their communities. This project worked to build resiliency and address indoor and outdoor air pollution challenges that have historically burdened Salt Lake City's Westside communities. This project was completed under the grant number: 95820612-0. The information in this document is the result of a collaborative problem-solving project engagement with local community organizations and community members, and does not necessarily represent the positions of the U.S. EPA. This project was also supported by the Richard K. and Shirley S. Hemingway Foundation and the Telemachus Foundation.

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Executive Summary

Historically, low-income and disadvantaged communities (LIDAC¹) have been left out of environmental programs and policy design, despite experiencing the greatest impacts of air pollution and climate change. This is especially true within the LIDAC communities located within the Salt Lake Valley. Salt Lake City's Westside is disproportionately affected by poor air quality due to higher concentrations of air pollution, resulting in greater health and socioeconomic risks than other communities in the valley. With funding from a U.S. EPA Environmental Justice Collaborative Problem-Solving Grant, Utah Clean Energy worked with LIDAC communities in the Salt Lake Valley to address these challenges by providing education and resources to improve air quality through home energy efficiency, and high-efficiency, electric technologies. We also worked with LIDAC communities to better understand the barriers and challenges to adopting energy efficiency measures. The ultimate goal of this project was to collaborate with community organizations and community members in the development of strategies to make home energy efficiency and electrification tools more accessible to LIDAC communities across the state.

Utah Clean Energy worked closely with four community organizations to build strong relationships within LIDAC communities, expand community awareness, and build capacity among community members. These four organizations are Calvary Baptist Church, Guadalupe School, the International Rescue Committee, and Westside Coalition. In partnership with these organizations, Utah Clean Energy conducted five phases of community engagement, including an energy awareness survey, home electrification consultations, listening sessions, vision and goal-setting meetings, and strategy co-development meetings. As a result of this collaborative community engagement, Utah Clean Energy and our partners developed an understanding of the barriers and challenges to home electrification in Salt Lake City's LIDAC communities. We also worked with community members to create a vision statement summarizing the community's vision for equitable home electrification, developed four high-priority solutions to the barriers of home electrification, and created several action steps for each solution, all based on community input.

This document is intended to inform and guide the design and implementation of programs and policies related to home efficiency and electrification that are intended to expand access for LIDAC communities.

1. These communities may also be referred to as underrepresented, underserved, disadvantaged, etc. In this report, UCE has chosen to use the term LIDAC to align with the EPA's language. Our intention is to be respectful of all communities.

Project Background

Equitable Home Electrification

Governments and utility companies are adopting "home electrification" strategies to help improve local air quality and address climate change. Home electrification is the process of replacing appliances that use gas (such as a gas furnace or a gas stove) with electric appliances (such as a heat pump or an induction cooktop). When done right, home efficiency and electrification upgrades reduce air pollution and emissions that contribute to climate change and poor air quality, while also supporting energy affordability. Despite experiencing the greatest impacts of air pollution and climate change (and often having higher energy burdens), underrepresented communities have been historically left out of program and policy design. In this project, Utah Clean Energy built resiliency and addressed local air pollution challenges that have historically burdened underrepresented communities, with a focus on Salt Lake County and Salt Lake City Westside neighborhoods. This project engaged Salt Lake City's Westside communities in a collaborative process to:

- 1. Build a shared understanding of home electrification,
- 2. Develop a community vision of equitable home electrification,
- 3. Identify the unique opportunities and barriers that the communities face,
- 4. Bring key stakeholders into listening sessions to help them understand community needs and goals, and
- 5. Co-develop strategies between the communities, government, utility, and service providers that integrate community needs into planning, programs, and policy.

Salt Lake Valley Communities

Salt Lake City's Westside is made up of several neighborhoods, including Poplar Grove, Glendale, Rose Park, Fairpark, Jordan Meadows, and Westpointe. These neighborhoods are the most racially and ethnically diverse areas in both Salt Lake City and the state of Utah. Almost half of the residents of the Westside are Hispanic/Latinx.²

Poor air quality is an ongoing issue in the Salt Lake Valley, especially for the Westside. Manufacturing and industrial activities, construction, freeways, railways, the Salt Lake City International Airport, and more are all concentrated on the Westside, leading to significantly worse air quality than in other parts of the city. This creates significant health impacts for Westside residents, including higher asthma burdens and increased risk of cancer from air pollutants.

We worked closely with four community partners, Calvary Baptist Church, Guadalupe School, the International Rescue Committee (IRC), and Westside Coalition, to conduct this collaborative problem-solving project.



Calvary Baptist Church is a historic, multi-generational, multi-cultural, Christian church in downtown Salt Lake City. Their 1,000-member congregation is made up of individuals and families from across the Wasatch Front and is primarily African-American.



Guadalupe School serves diverse immigrant and refugee populations in the Poplar Grove, Rose Park, and West Valley City areas. Their families are primarily Hispanic or Latino, and 95% of families live at or below the poverty level.



The International Rescue Committee provides opportunities for refugees, asylees, victims of human trafficking, survivors of torture, and other immigrants to thrive in America. They work with government bodies, civil society actors, and local volunteers to help them translate their past experiences into assets that are valuable to their new communities.



Westside Coalition is a nonprofit community organization that advocates for the health, safety, and quality of life of Salt Lake City Westside residents. These organizations are well-known and trusted in Salt Lake's underserved communities, and they were instrumental in conducting community outreach and building strong relationships within communities.

To help make the obscure concept of "home electrification" more concrete to community members, Utah Clean Energy educated community members about the health and air quality benefits of using electric cooking by distributing free induction cooking kits to over 120 community members. Gas stoves can release NOx and VOCs which create poor indoor air quality and methane that contributes to climate change.³Utah Clean Energy received a grant from the Intermountain Community Care Foundation. This grant was used to purchase 'induction cooking kits', consisting of a single-burner, portable induction cooktop and an induction-compatible pot and pan, and were distributed to Westside community members at no cost, with priority going to households that use gas stoves for cooking.

3. Read more: Utah Clean Energy, The Science Behind the Gas Stove Kerfuffle: https://utahcleanenergy.org/the-science-behind-the-gas-stove-kerfuffle/

In fact, the pollutants released from gas stoves present health risks on par with secondhand smoke.⁴ This giveaway provided underserved community members with a real-world opportunity to use energy-efficient cooking equipment that keeps their indoor air cleaner and healthier. Over 120 community members received induction cooking kits. Many participants reported a significant reduction in the number of days per week they used their gas stove, and 71% reported that they were very likely to recommend induction cooking to friends and family. Below is a snapshot of participant feedback:

"Cooking with induction helps me with my asthma."

"I now understand how much gas is released into the indoor air that my family breathes every day the gas stove is being used."

"It is easier to clean, it protects air quality, it is safe, the water on it heats up much faster, it emits less heat when cooking."



4. The Guardian, <u>https://www.theguardian.com/environment/2023/jun/20/gas-stoves-benzene-levels-study#:~:text=Leaving%20a%20single%20gas%20hob,emit%20significant%20levels%20of%20benzene.</u>

Community Engagment

Throughout this two-year project, the project team followed a multi-phase community engagement plan with the goal of creating a shared understanding of home electrification, identifying areas of interest and barriers to home electrification, and co-developing a vision, goals, and strategy for equitable home electrification. Utah Clean Energy's community engagement project design was modeled on the U.S. EPA's Environmental Justice Collaborative Problem-Solving Model.⁵ Over the course of these engagement activities, we received feedback from 245 individual community members. We also met monthly with leaders of community partner organizations throughout the project.

We began our community engagement activities with a community energy awareness survey, which asked several questions about overall energy awareness and energy efficiency. Next, we conducted home electrification consultations, in which Utah Clean Energy staff walked through community members' homes to discuss home efficiency and electrification and discuss opportunities and barriers to electrification in each home. UCE staff then followed up with a written report (see Appendix B for an example home electrification plan). The next phase of community engagement involved hosting four "listening sessions" where participants answered questions related to home energy use, air quality, etc. We consolidated feedback from both the home electrification consultations and the community listening sessions and identified several themes for the barriers, challenges, and opportunities for home electrification.



BARRIERS & CHALLENGES



High up-front cost of electrification improvements



Families and homeowners have other more important priorities than home electrification



Distrust of contractors



Concern with resiliency of unknown technologies



Unable to make decisions about the property



Lack of access to information and guidance



Don't believe that the property is well-suited to the desired upgrades

We then hosted vision and goal-setting meetings, where community members developed a vision statement and high-level goals related to home electrification. To narrow down which ideas the community was most interested in (and which ideas should be further refined), we also asked community members to select their preferred vision statement and general goals. We synthesized the community feedback into a finalized vision statement and general goals that are designed to address the barriers and challenges identified by the community. (See page 11 for the vision statement.)

Finally, we hosted several strategy co-development meetings, where we gathered feedback from community members about the specific solutions that they thought would make home electrification more accessible to Utah families. Based on these discussions, Utah Clean Energy staff converted the community feedback into four specific solutions, each with three action steps, that can play a role in achieving the communities' priority solutions.

Each specific solution is outlined below, along with the general goal and barrier/challenge it is meant to address. These solutions address the four barriers and challenges that community members were most concerned about. This information is explained in further detail in the next section.

- **Specific solution:** Launch the Utah Home Energy Rebate Programs in 2024 in a way that responds to community needs.
- General goal: Reduce the up-front costs of home electrification.
- Barrier/challenge addressed: High up-front cost of electrification improvements.

- **Specific solution:** Launch a public education campaign about home energy upgrades and programs and programs that can make home electrification easier.
- **General goal:** Educate community members about the importance of home electrification and the programs that can make home electrification easier.
- Barrier/challenge addressed: Lack of access to information.
- **Specific solution:** Create a home energy assessment program that is responsive to community needs by 2025.
- **General goal:** Make the home electrification process easier to understand by creating programs that provide technical assistance and guidance through the process.
- Barrier/challenge addressed: Concern with the resilience of unknown technologies.
- **Specific solution:** Recruit and train contractors to install electric appliances in low- to moderateincome homes with efficiency upgrades and through home energy rebates.
- **General goal:** Create programs that help community members understand whether a contractor can be trusted to install new energy-efficient and electric technology.
- Barrier/challenge addressed: Distrust of contractors



Community Strategy

Where do we want to go?

Throughout this project, we spoke with many community members and gathered invaluable input on how our communities and stakeholders can work together. As a result of this engagement, community members identified four general goals that they wanted to prioritize as we developed actionable solutions. The goals listed below served as guideposts as we identified four priority solutions for making equitable home electrification a reality.

Vision Statement

"Our vision is a community invested in clean air and where equitable access to affordable, clean technology is available to all homes."

General Goals

Reduce the up-front costs of home electrification

Educate community members about the importance of home electrification and the programs that can make home electrification easier



Make the home electrification process easier to understand by creating programs that provide technical assistance and guidance through the process



Create programs that help community members understand whether a contractor can be trusted to install new energy-efficient and electric technology

Home energy rebates



Solution 1: Launch the Utah Home Energy Rebate Programs in 2024 in a way that responds to community needs.

Up-front costs was identified as the top barrier to of home efficiency and electrification upgrades. Utility and government programs designed to reduce up-front costs of these upgrades play a big role in making home upgrades more accessible to community members. One such example is the "Home Energy Rebate Programs" that Utah received funding for through the passage of the Inflation Reduction Act.

The Home Energy Rebates program will provide rebates of up to \$14,000 per home to help Utahns make energy efficiency and electrification upgrades to their homes. The impact of these rebates will include saving money on energy bills, upgrading to modern, energy efficient appliances, and reducing indoor and outdoor air pollution. To ensure these programs are accessible and address community concerns, the program application process would be simple and available in multiple languages. In addition, these programs should make sure that upgrades to homes do not result in higher utility bills. The Utah Office of Energy Development is the state agency responsible for applying for federal funds and administering this program in Utah. Staff from this Office should continue to listen to the community to learn about the needs of underserved communities as they develop the Home Energy Rebates program.

Key stakeholders: Utah Office of Energy Development, Rocky Mountain Power, Dominion Energy, Unversity Neighborhood Partners, and other state and local agencies where these solutions can be used to design and implement other projects (such as the Salt Lake City Department of Sustainability and the Utah Division of Air Quality)

Funding opportunities: <u>U.S. Department of Energy's Home Energy Rebate Programs</u>, <u>U.S.</u> <u>Department of Energy State-Based Contractor Training Grants</u>, <u>U.S. Environmental Protection</u> <u>Agency's Climate Pollution Reduction Grants program</u> This solution will overcome the barrier of high up-front costs for home efficiency and electrification upgrades, bringing improved indoor and outdoor air quality, increased home comfort, and manageable energy bills to LIDAC community members.

Action steps

Step 1: Develop a detailed implementation plan for the home energy rebate (HER) programs that prioritizes community feedback. Many of the ideas and suggestions that were gathered during this project should be directly addressed within the HER program plan. These include making the application and eligibility process accessible and simple, offering technical support to applicants, and offering information in multiple languages.

- Resources needed: staff time to support community coordination to ensure that HER program is responsive to LIDAC member needs
- Success indicators: Number of applicants from LIDAC communities

Step 2: Market the HER programs in a way that effectively reaches LIDAC communities. Create marketing materials in the languages spoken in our communities. Involve community leaders and community members in the development of these educational materials so information is presented in a way that responds to community needs. Make sure the HER program website's search engine optimization (SEO) is effective so that community members can find it using a search engine, and include a catchy slogan so community members can easily remember where to find information and translate the website into other languages that meet community members' needs.

Offer in-person informational sessions on the HER programs within communities in multiple languages, through strategies such as a "residential energy coach" program.⁶ Integrate HER program marketing into the equitable electrification education campaign (detailed below).

- Resources needed: Marketing and SEO expertise, translation services, community coordination, allocation of funding to create/launch/support a "residential energy coach" program
- Success indicators: Website traffic metrics, specifically tracking utilization of pre-eligibility screening; "how helpful was this?" pop-up/form

Step 3: Include representative number of spots in stakeholder feedback groups for leaders from LIDAC communities to have a "seat at the table". The HER program guidance requires that states establish certain stakeholder feedback groups to inform the HER program process. All stakeholder feedback groups should have dedicated spots for leaders from LIDAC communities to represent communities' interests, needs, and priorities.

- Resources needed: Coordination with communities to identify LIDAC leaders, possible translation services during stakeholder meetings
- Success indicators: Number of LIDAC community leaders involved in stakeholder feedback groups



Equitable electrification education campaign

Solution 2: Launch a public education campaign about home energy upgrades and programs and programs that can make home electrification easier.

This public education campaign would use multiple methods to disseminate information about poor air quality, the importance of home efficiency and electrification, and the available incentives to reduce the cost of energy upgrades. It would be available in multiple formats (traditional advertising, social media, tabling at community events, community presentations, etc.) and in multiple languages. Information about the HER program and other home energy upgrade incentive and rebate programs should be incorporated throughout the education campaign.

Key stakeholders: Community organizations, Utah Office of Energy Development, Rocky Mountain Power, residential energy efficiency and HVAC industry partners

Funding opportunities: administrative and marketing funding from the Inflation Reduction Act and marketing funding from utility energy efficiency programs, such as Rocky Mountain Power's Wattsmart program.

A broad public education campaign will ensure that community members who stand to benefit the most from home energy efficiency and electrification measures will have the opportunity to learn about the importance of efficiency and electrification and the incentive programs that can help them get involved.

Action steps

Step 1: Develop accessible educational materials to explain the step-by-step process of electrification in plain language. Create these materials in the languages spoken in their communities. Involve community leaders and community members in the development of these educational materials so information is presented in a way that responds to community needs.

- Resources needed: funding; interpretation
- Success indicators: gather feedback from a certain number of community leaders and successfully develop educational materials.

Step 2: Create a one-stop-shop website to house all information about the importance of efficiency and home electrification, basic information about electrified technologies, and how to access incentives, including the Home Energy Rebates and other technical, educational, and incentive programs. Include a feature that estimates a community member's eligibility for rebates based on factors such as home condition, location, household income, and which electrification improvements they are considering. Make sure the website can easily be translated into common languages other than English. In addition, the website's search engine optimization is effective so that community members can find it using a search engine, and include a catchy slogan so community members can easily remember where to find information.

- Resources needed: funding; staff with experience in website development/SEO
- Success indicators: Website traffic metrics, specifically tracking utilization of pre-eligibility screening, pop-up survey to assess participant satisfaction.

Step 3: Offer in-person education at community events and community locations (such community fairs, schools, neighborhood council meetings, community groups). Tailor educational programming to focus on the needs of specific communities, such as the needs of communities that are primarily renters vs homeowners. In-person events should include language interpreters for priority languages spoken commonly in the communities where the events are being offered.

- Resources needed: funding; program coordination for community-based outreach program
- Success indicators: Host events at a certain number of community events/locations; survey community members to see if they found the information helpful

Home assessment program

Solution 3: Create a home energy assessment program that is responsive to community needs by 2025.

A home energy assessment program, such as the Rocky Mountain Power (RMP) Wattsmart home assessment program, involves a professional assessor visiting the home and identifying inefficiencies and opportunities to save energy and adopt new electric appliances. This solution proposes to expand the current RMP home assessment program so that home energy assessors have greater capacity to provide actionable, accessible information, and to expand awareness and access of the program so that more communities are able to benefit from a home assessment.

Key stakeholders: Evergreen Efficiency, Rocky Mountain Power, Utah Office of Energy Development, community organizations

Funding opportunities: Inflation Reduction Act Home Energy Rebates administrative funds, contractor training grant, other relevant state, federal, or utility funding, <u>federal Energy Auditor</u> <u>Training Grant Program</u>

A home energy assessment program that community members and community organizations trust is an essential first step to completing energy efficiency and electrification upgrades throughout the community.

Action steps

Step 1: Build capacity of assessors to have up-to-date and accurate knowledge about energy efficient electric technologies (heat pumps, induction cooking, etc.) so that assessors can inform community members about the next steps to electrify their homes. Assessors must be BPI-2400 certified to ensure that they are able to provide the most up-to-date and standardized information and guidance. All assessors will also obtain training on cultural humility to ensure that they are able to work effectively within different cultural and social contexts. This is especially important when we consider the community feedback that highlighted how important it is to build trust within our LIDAC communities. Participants who received a home assessment should feel comfortable allowing an assessor into their home.

- Resources needed: Funding; access to training programs for assessors to learn and standardize their knowledge and cultural humility; access to be BPI-2400 certification for assessors
- Success indicators: RMP to conduct a survey to get feedback from assessors on training effectiveness; RMP to conduct a survey to get feedback from program participants on their experience receiving a home assessment

Step 2: Expand awareness of home assessment programs through marketing and outreach. Stakeholders will work together to on branding for the expanded home assessment program that is simple, accessible, and in alignment with both RMP and OED's home energy rebate program marketing efforts. The marketing materials should be developed in multiple languages and meet ADA standards for accessible design. Community members expressed that they often find out about new opportunities from friends, family, and neighbors so this solution may involve creating a referral system to encourage sharing information via word of mouth.

- **Resources needed:** funding; marketing materials including website design and search engine optimization
- Success Indicators: monitor number of website hits, referrals, and assessment applications. This data gathering should enable stakeholders to understand what kinds of households are receiving home assessments (such as homeowners, renters, geographic location, family size), what languages translation services are being requested, and how households are finding out about the program.

Step 3: Expand the reach of the home assessment program so more assessments can be completed, and assessments can be offered in multiple languages and a virtual format. Once a training program has been developed and a marketing strategy has been created, the third step will be to expand the reach of the home assessment program by recruiting and training more assessors. As of late 2023, the RMP home assessment program has 1 assessor and is able to reach about 60 households a month.

For this solution to be impactful, additional assessors are necessary to conduct both in-person and virtual assessments. Additionally, interpretation services must be readily available. When a household signs up for a home assessment, they will provide information on what their primary language is and if translation will be needed during the assessment. For those that require translation, the RMP home assessment will partner with local organizations like the International Rescue Committee of Salt Lake City to arrange for a translator at the time of the assessment. Resources needed:

- Staff (additional assessors), interpreters, technology infrastructure for virtual assessments and collecting program feedback
- Success indicators: RMP to conduct a survey to get feedback from assessors on training effectiveness; RMP to conduct a survey to get feedback from program participants on their experience receiving a home assessment



Contractor recruitment and training



Solution 4: Recruit and train contractors to install electric appliances in low- to moderate-income homes through home energy upgrade programs.

This goal focuses recruitment and training efforts in low- to moderate-income and/or underrepresented communities to increase job opportunities for LIDAC communities and increase the number of qualified contractors who work in LIDAC communities. In addition to other funding opportunities, about 1.75 million in funding is available through the Training for Residential Energy Contractors grant to support training of home efficiency and electrification contractors in Utah.

Key stakeholders: Utah Office of Energy Development, Rocky Mountain Power Wattsmart Home Trade AllyNetwork/Evergreen Consulting Group, Rocky Mountain Gas Association, Department of Workforce Services, Davis Technical College HVAC training program, Salt Lake Community College, Mitsubishi, Daikin, localinsulation contractors, Aerobarrier, Salt Lake City Economic Development

Funding opportunities: Training for Residential Energy Contractors grant

Involving local community members in contractor training supports high-paying local jobs and helps build trust and familiarity between the program and community members.

Action steps

Step 1: Develop accessible educational materials to explain the step-by-step process of electrification in plain language. Create these materials in the languages spoken in their communities. Involve community leaders and community members in the development of these educational materials so information is presented in a way that responds to community needs.

- Resources needed: funding; interpretation
- Success indicators: gather feedback from a certain number of community leaders and successfully develop educational materials.

Step 2: Launch recruitment effort in LIDAC communities targeting community engagement towards peer-to-peer communication and recruitment leveraging local technical colleges and on-the-job training programs. Emphasize the job security and earning potential of careers in contracting and appliance installation/repair. (The recruitment campaign could be modeled on the Utah Machinist Apprenticeship Program: <u>https://machineutah.org/</u>)

- Resources needed: Staffing to support development of recruitment materials, partnerships with local technical colleges
- Success indicators: Recruitment program launched, applicants sign up for training through recruitment program, increase enrollment in electrification-related training programs at technical colleges

Step 3: Expand existing training programs to include education on the latest electrification technologies per Home Energy Rebate standards (including heat pumps, heat pump water heaters, electrical upgrades, home energy audits, etc.). Include instruction on how to effectively work in LIDAC communities (such as how to effectively promote a business on the westside).

- Resources needed: Financial sponsorship from industry partners, manufacturer trainings
- Success indicators: Assess success of training program participants by surveying graduates and their employers

There were many great ideas that emerged throughout the community engagement process that could be impactful but were not selected by the community as one of the 4 priority solutions. These additional solutions should be considered by decision makers — including utility efficiency programs, local and/or state governments, as well as other entities — for future implementation to support equitable home electrification. Please see Appendix C for more details on each of these suggested solutions and the full survey results that helped us identify priorities.

- Launch a utility on-bill repayment program in 2027.
- Create a "Residential Energy Coach" program in 2025.
- Build "Neighborhood Energy Centers" throughout our neighborhoods by 2024.
- Adopt contractor certification standards for home energy upgrades in 2024.

What now?

Numerous opportunities exist to build momentum and implement the solutions and goals outlined in this strategy. These opportunities include utility-sponsored energy efficiency programs, local and state government policies and programs, as well as workforce training initiatives, and community education efforts about clean air and energy efficiency.

As of the date that this strategy was published, several high priority opportunities for continuing this work, include:

- The state of Utah's efforts to launch a statewide home energy rebate program and related activities.
- Ongoing implementation of and updates to utility-sponsored energy efficiency incentive programs, including community outreach and marketing plans that are responsive to community needs. Utah utilities that could include these solutions include Rocky Mountain Power, Dominion Energy, and municipal utilities such as Provo Power.
- Updates and changes to affordable housing agency programs and rules. Affordable housing stakeholders include the Utah Housing Corporation, the Utah Nonprofit Housing Corporation, the Olene Walker Housing Fund, and the Redevelopment Agency of Salt Lake City.
- New and existing planning efforts, programs, policies, and community engagement efforts managed/overseen by local governments, such as implementation of city-level sustainability plans.
- The development of Utah's <u>Beehive Emission Reduction Plan</u> (led by the Utah Division of Air Quality) and the <u>Salt Lake MSA CLEAR</u> (led by Salt Lake City Sustainability Department).
- Other federally funded clean energy, energy efficiency, air quality, and climate solution programs that are being considered in Utah.

There are multiple efforts taking place within the Salt Lake Valley to address environmental injustice. Two such efforts are listed below and present additional opportunities for community engagement to support equitable home electrification and other social and climate equity outcomes:

- University Neighborhood Partners' Environmental Justice Resident Committee
 - Contact Wisam Khudhair <u>Wisam.Khudhair@partners.utah.edu</u> and Kimberly Schmidt <u>k.schmit@partners.utah.edu</u> for more information.
- Natural History Museum of Utah's <u>A Climate of Hope</u> Community Research Corps
 - Contact Lisa Thompson https://www.utah.edu for more information.

Community Acknowledgements

We want to say THANK YOU to all of the community members who took the time to come to events and share your insight. We appreciate every time you sacrificed your time and energy to contribute to equitable clean air solutions. Everything in the Community Strategy for Equitable Home Electrification was driven by your thoughtful ideas, experiences, and input.

And the good news is – this is just the beginning! We will continue to share information for ways that you can stay involved as these solutions move forward.



Appendix

Community Engagement Deliverables and Outcomes

Leading up to the final deliverable of a co-developed strategy for equitable home electrification, multiple smaller deliverables were created to document each phase of the project and collect and communicate key learnings.

Appendix A: Community Energy Awareness Survey

In 2022 and 2024, Utah Clean Energy distributed a community energy awareness survey. These slides summarize the results. <u>bit.ly/2022-energy-awareness-survey</u> <u>bit.ly/2024-energy-awareness-survey</u>

Appendix B: Sample Home Electrification Plan

In 2023, Utah Clean Energy conducted Home Electrification Consultations, in which UCE staff visited community members' homes to discuss home efficiency and electrification opportunities. Below is an example of a written report that was provided after a consultation.

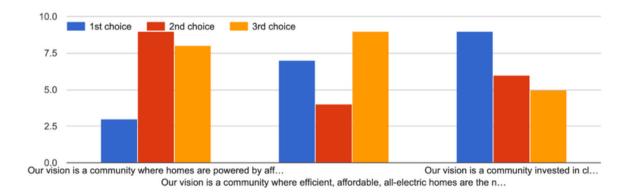
Example: <u>https://bit.ly/exampleHEP</u>

Appendix C: Vision and Goal-Setting Survey results

Participants rated three vision statements from first to third choice. We ran the results through a ranked voting calculator and identified the most popular vision statement in our community. The options for vision statements, which were developed based on community feedback, included:

- Our vision is a community where homes are powered by affordable, accessible, clean electricity.
- Our vision is a community where efficient, affordable, all-electric homes are the norm and clean indoor and outdoor air is available to all.
- Our vision is a community invested in clean air and where equitable access to affordable, clean technology is available to all homes.

The following vision statements were developed based on feedback from the community. Please rank your first, second, and third choices. The visi...tes will serve as the community's vision statement.



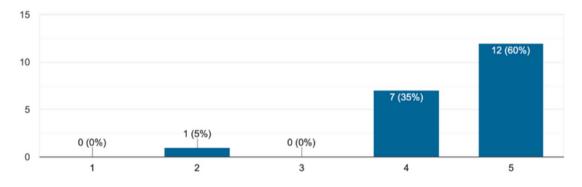
23

Participants next read about each of the four goal categories and two proposed solutions for each, which were also developed based on community feedback. Participants rated each proposed solution on a scale of 1-5, 1 being not helpful and 5 being very helpful. To identify our front-runners, we added up the number of 4 and 5 votes for each solution, and identified the solutions the community thought would be most helpful. Insert graphs for top responses

The following shows the results for the runner-up solutions.

Top responses

Solution: Launch the Utah Home Energy Rebate Programs in 2024 in a way that responds to community needs. The home energy rebate programs w... to homes do not result in higher utility bills. 20 responses



Appendix D: Sample Action Plan:

Following our strategy co-development meetings, Utah Clean Energy staff drafted three action steps for each solution based on the action planning template from the U.S. Department of Energy's Better Building CELICA toolkit. These draft action plans became the basis for the final strategy outlined in this report. See below for a sample action plan for solution #2.

Example: bit.ly/sampleactionplan-solution2