



Date: May 24, 2022

Honorable Mayor and Council Members:

Author and title: Sara Sherburne, Sustainability Program Analyst

Title: **Home Weatherization Rebate Expansion Program partnership with Truckee Donner Public Utility District**

Approved By: _____ Jen Callaway, Town Manager

Recommended Action:

- 1) Approve development and launch of the Home Weatherization Rebate Expansion Program partnership with Truckee Donner Public Utility District

Discussion:

One of Town Council's five priorities is to reduce Truckee's community greenhouse gas emissions. Specifically, the 2022-2023 Council Workplan directs staff to create a residential home energy retrofit program with the goal of reducing building energy use. Staff have been researching other existing programs and collaborating with local utilities to determine how to best enhance existing programs and design new ones. An initial outcome of these conversations is the proposal for an expanded home weatherization rebate program in collaboration with the Truckee Donner Public Utility District (TDPUD).

In Truckee, building energy use comprises 59 percent of total community greenhouse gas (GHG) emissions, with 72 percent of that attributable to residential building energy use. Our local utilities are making strides to decarbonize the building stock and energy supply through multiple avenues, one of those being incentive programs that encourage residents to retrofit their homes. The TDPUD, which serves 95 percent of Truckee's residents, recently revamped and launched a series of energy efficiency rebate offerings to its customers.¹ Liberty Utilities, which serves the other 5 percent of the community, is in the process of developing its residential rebate program. TDPUD offerings include free energy surveys and rebates for Energy Star rated electric appliances, heat pumps, heat pump water heaters, induction cooktops, EV chargers, electric panel upgrades, water efficient toilets and leak repairs. These rebates are available to TDPUD customers with any kind of primary home heating source (i.e., electric, gas, propane, wood).

TDPUD also offers rebates for building envelope tests and improvements, which reduce the amount of heating/cooling that homes need to do in the first place and improve indoor air quality, particularly during wildfire season. However, due to restrictions placed on utility program funding, these programs are currently **only available to customers with primary electric heating, which, according to US Census data, is only about 12.7 percent of residents in Truckee.** This means that the vast majority of residents are not able to access rebates for home weatherization. Currently, Liberty customers (regardless of primary home heating fuel) do not have rebate options for home weatherization either. The proposed Town-funded Home Weatherization Rebate Expansion Program intends to fill these gaps to expand weatherization rebates to all Truckee residents. This program expansion is intended to achieve the following goals:

¹ Available here: <https://www.tdpud.org/departments/energy-and-water-conservation/services-and-programs>

- Improve home energy efficiencies to reduce natural gas usage and thereby reduce G emissions and air pollution
- Enhance residential indoor air quality, particularly during wildfire season, through building envelope improvements
- Spur community conversation around energy efficiency
- Reduce resident cost of living by lowering utility bills for residential heating

Staff recommend partnering with TDPUD to offer a year-long pilot program that will leverage TDPUD’s existing program and use Town funding to expand TDPUD’s current weatherization rebate offerings to all residents. TDPUD will continue to fund rebates for TDPUD customers on primary electric heating, and Town funds would provide rebates to residents who are not eligible for TDPUD rebates (i.e. customers who do not have primary electric heat as well as Liberty Utilities electric customers).

Proposed Building Envelope Rebates (current TDPUD rebates)

Building Envelope Air Leak Test	\$75
Central System Duct Leakage Test	\$75
Building Envelope Air Leakage Mitigation	50% up to \$250
Central Air Distribution System Duct Mitigation	50% up to \$250
Efficient Windows	\$2 per sq. ft.

IMPLEMENTATION

TDPUD has a specialized software system that handles their applications and rebates. To expand program offerings to customers with primary gas heating, TDPUD would simply adjust their online application to reflect this new eligibility and make any adjustments to energy savings calculations accordingly. Each month, TDPUD would invoice the Town for the rebate amounts that had been distributed to gas-primary customers.

For Liberty customers, TDPUD has offered to create a similar online application that Liberty customers could access from the Town website. Town Staff would then be responsible for verifying the authenticity of the application and processing payments directly to these customers. This will be feasible given the small number of Liberty customers.

The Town and TDPUD will work together to market the expanded program. While the application form will be hosted through TDPUD’s application portal system, the Town will provide program information and the application link directly from the Town and Keep Truckee Green websites and will promote the program through social media, community events, and other outreach channels.

BUDGET

The proposed program budget is \$40,000 for FY22/23 which would provide approximately 123 rebates.² TDPUD has a current program budget of \$97,475 for all residential energy efficiency rebates.³ For the pilot year, there will be no overhead or administrative cost associated with this project. However, if the Town decides to continue the program, TDPUD requests a contribution for the annual software licensing of between \$3,000 and \$5,000. If, during the pilot year, TDPUD encounters a significant, unanticipated administrative effort, they will initiate a discussion regarding additional costs. It is difficult to estimate the degree of program uptake at this time because TDPUD’s rebate programs have been inactive during COVID, and only a limited pool of TDPUD customers have been eligible for their past weatherization programs. Additionally, past programs have not benefited from additional robust Town-driven marketing. Town staff consider the proposed program and budget to be a first step

² For the purposes of quantification, this defines one rebate as a test and mitigation measure together at the maximum rebate amount, which is \$250+\$75. One customer could receive up to three rebates defined in this manner if they perform all the measures listed above (building envelope, duct and window improvements). Window rebates are not included in the average cost estimate due to variability in project size.

³ excluding income-qualified programs, which have a budget of \$16,710

and we will consider adjustments if the program is not effective or the proposed budget is fully expended.

ENERGY SAVINGS

As rebate applications come in, TDPUD will be able to use their software to provide estimated energy and GHG savings based on the applicant's home and the measures they have completed. At this time, they do not have historical data to provide initial estimates. However, looking to outside sources, a skillfully weatherized home can save up to 20% on heating and cooling costs while enhancing home comfort.⁴ Just replacing the windows and doors in an average older home with high efficiency windows and doors could reduce household energy consumption by about 7% each year.⁵ These savings scale up as more and more homes implement weatherization measures, bringing the Town closer to achieving its GHG reduction goals.

Priority:

- | | | | | | |
|--------------------------|---------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------|
| <input type="checkbox"/> | Enhanced Communication | <input checked="" type="checkbox"/> | Climate and Greenhouse Gas Reduction | <input checked="" type="checkbox"/> | Housing |
| <input type="checkbox"/> | Infrastructure Investment | <input type="checkbox"/> | Emergency and Wildfire Preparedness | <input type="checkbox"/> | Core Service |

Fiscal Impact:

The approved 5-year CIP budget for Greenhouse Gas Emissions Reductions (C1510) includes sufficient funding for this project. The approved CIP budget includes \$150,000 in FY22/23 for a Home Energy Retrofit Program. The proposed home weatherization rebate expansion program is one component of this overall program.

Public Communication:

The idea for a home energy retrofit program initially arose through outreach and workshops conducted for the development of the Town's Climate Action Plan Element in 2019 and 2020, and it was subsequently incorporated into the Council Workplan. Staff have communicated extensively with TDPUD to a) identify the need for the program and b) develop the structure of the program. Outreach to other jurisdictions and energy experts in the area has confirmed the importance of home weatherization and its energy saving potential. The program will be communicated to residents through traditional TDPUD and Liberty outreach (including mailers, emails etc.) as well as through Town social media channels and media partners (i.e. Sierra Sun).

Attachments:

None

⁴ US EPA https://19january2017snapshot.epa.gov/climatechange/what-you-can-do-home_.html

⁵ Climate Change Connection <https://climatechangeconnection.org/solutions/home-construction/energy-efficiency/windows/>