

Analysis

Background

On January 26, in Order No. 22-024, the Commission granted a major cost-effectiveness exception for 28 ductless heat pump (DHP) measures, effective until March 31, 2025. Staff recommended the waiver to allow Energy Trust to develop a pilot offering DHPs to low-income households at no cost. The Commission set an expense ceiling of \$5 million for the pilot.

Pilots with budgets exceeding \$1.5 million require Energy Trust to receive a cost-effectiveness exception approved by the Commission.¹ In this case, Staff determined Energy Trust's request to require a major exception, necessitating additional process.² The Commission granted the cost-effectiveness request under three criteria: (1) the measure is consistent with other demand-side management programs in the region promoting DHPs. (2) It is a pilot with the potential to show how low- and moderate-income populations can be served better. (3) It is consistent with the intent of House Bill (HB) 2475 (2021) and Commission policy to increase equity in energy efficiency programs. This corresponds to Criteria C, F, and G for cost-effectiveness exceptions, as outlined in Order No. 94-590.

At the time, Energy Trust explained that the purpose of the pilot was to learn about different delivery mechanisms and barriers to low- and moderate-income household participation in energy efficiency programs.³ Energy Trust proposed to work with various community stakeholders to inform program design, favoring a delivery approach reliant on community-based organizations (CBO).

On March 26, 2024, Staff received a request from Energy Trust to increase the no-cost DHP pilot cap from \$5 million to \$7 million. Energy Trust explained that it had committed virtually all funds and had started slowing down installs by CBOs, despite additional delivery capacity. While Energy Trust plans to transition the pilot into a permanent program, it does not anticipate doing so until 2025, when new funding sources may allow the program to become cost-effective.

Pilot Performance and Staff Review

Since the pilot launch in Q3 of 2022, Energy Trust worked with 21 community partners to install 559 DHP systems in 206 single-family and 353 multifamily low-income homes around the state. For 2024, virtually all funds are committed, and without additional

¹ See Order No. 23-126. Previously, the threshold was \$500,000, see Order No. 15-029.

² In accordance with Order No. 14-332 (UM 1622), cost-effectiveness exception requests are classified as minor and major.

³ See Staff Report for the December 28, 2021, Public Meeting in Docket No. UM 1696.

funding, participating CBOs will discontinue the use of this offer. Energy Trust and community partners have invested in delivery capacity and there is additional demand for completions in 2024. Table 1 shows current and projected completions and expenses.

Table 1:

Year	Single-Family Installations (Units)	Multifamily Installations (Units)	Total Installs (Units)	Incentive Spend
2022	48	103	151	\$780k
2023	158	250	408	\$2.3m
2024 (in budget)	204	164	368	\$1.83m
2024 (new budget)	289	439	728	\$3.83m
Totals	410 - 495	517 - 792	927- 1287	\$4.9m -\$6.9m

Staff reviewed information provided by Energy Trust and finds that community partners are a viable mechanism for reaching energy-burdened customers with low and moderate incomes. Energy Trust’s DHP install costs are between \$4,100 and \$7,700 depending on housing type and number of indoor head units. Staff finds this to be an excellent price, considering that participants bear no costs. The average total install cost for residential DHPs in Energy Trust’s portfolio was \$8,931, while the average install cost for the no-cost DHP program was \$6,288 (in 2023). This lower price partially reflects a different measure mix and the fact that many CBOs already contribute their own resources to make these offers no cost.

Beyond costs, community partners reduce other barriers to participation for priority populations. CBOs as project managers can reach individuals who are unlikely to install energy efficiency through contractors. CBOs also provide wrap-around services that reduce risks for participants (e.g. delays, additional costs, upselling). Some community partners leverage other funding sources to be able to offer whole-home weatherization at no cost and may even connect participants to other resources like home repair or energy assistance.

The installation of DHPs provides substantial energy burden relief to participating customers. The average single family measure replacing resistance heat saves the participant around \$610 a year at Portland General Electric (PGE) prices and \$425 a year at Pacific Power (PAC) prices.⁴ For manufactured home measures, this

⁴ The average residential rate at PGE is currently 19.66 cents/kWh according to the Company’s [website](#). The average residential rate at PAC is currently 13.695 cents/kWh according to the Company’s [website](#).

number increases to \$710 at PGE and \$495 at PAC, while multi-family savings are lower with \$295 at PGE and \$205 at PAC. Many CBOs install additional measures that may increase savings. The existence of bill discount programs means that 15 to 60 percent of bill savings are converted to ratepayer savings.

While a formal evaluation of the Pilot will not be available until 2025, Staff believes that these numbers and findings are indicative of a successful program. Energy Trust has already proven the concept delivering energy efficiency to low-income households through CBOs at a low cost. Energy Trust has expended substantive resources to develop relationships with CBO's and help them develop delivery capacity. It would be reasonable to expect that stopping the flow of work, while developing a permanent program, may be damaging to these relationships.

The \$2 million budget increase does not represent an increase to Energy Trust's overall approved budget. Energy Trust is reallocating money from other offers in the residential and existing (multifamily) buildings portfolio. In practice, this means largely converting market-rate DHP incentives to no-cost DHP incentives. Staff also notes that a budget increase would be consistent with the 2024 Energy Trust Performance Measures, which the Commission adopted on March 21, 2024, in Order No. 24-079. Under equity-related Performance Measures, Energy Trust must increase the number of customers receiving no- or low-cost offers. This may be difficult without allocating appropriate funding levels. Expanding the no-cost DHP pilot is also consistent with the aspirations of Energy Trust's 2024 budget and action plan which is supported by the Commission.⁵ The budget promises an increase of investments in offers that are delivered at no costs to the participant.

Energy Trust evaluated the cost-effectiveness of this pilot under new avoided costs that were adopted by the Commission on April 30, 2024.⁶ For the measures included in this pilot, the aggregate Utility-Cost Test (UCT) is 0.6, while the aggregate Total Resource-Cost Test (TRC) is 0.9. For some DHP measures in scope, cost-effectiveness is lower and delivery partners can request exceptions for documented extra costs. Staff does not find these numbers concerning because the goal is to allow households to participate that cannot afford to make energy efficiency investments themselves. Energy Trust estimates that an additional \$2 million for the no-cost DHP pilot will have no significant impacts on overall benefits cost ratios in the Energy Trust portfolio. Energy Trust's portfolio remains cost-effective.

⁵ The 2024 budget and action plan can be found on the Energy Trust website, <https://www.energytrust.org/about/our-impact/budget-action-plan/>.

⁶ UM 1893, [Order No. 24-119](#), May 2, 2024.

Energy Trust will address the further continuation of the pilot through its 2025 budget request. Staff expects to see a plan for this program before the end of the year. The no-cost program delivery infrastructure can be used to leverage other funding sources. Energy Trust is planning to use funds that may become available in late 2024 or early 2025 to make the program cost-effective, including federal HOMES/HEAR rebates, the ODOE heat pump program, and Portland Clean Energy Fund (PCEF) programs. Even with complementary funding, there may remain regional gaps, necessitating minor cost-effectiveness exceptions for ratepayer funding. Staff hopes that the implementation of HB 2475 (2021) in UM 2211 will offer a pathway for dealing with low-income energy efficiency outside of a cost-effectiveness exception framework.

Stakeholder Positions

Energy Trust informs Staff that it continuously receives feedback from participating community partners, and they support the request. Energy Trust also states that it reached out to Portland General Electric (PGE) and Pacific Power (PAC). Energy Trust reports that neither PGE nor PAC oppose the request. Energy Trust also conducted outreach via the members of its Conservation Advisory Council (CAC). Energy Trust states that five members provided feedback, all supportive of the proposed budget increase. CAC members stressed the importance of making heat pumps available to low-income households and commended Energy Trust for operating the program efficiently.

Conclusion

After reviewing all available information, Staff supports Energy Trust's request to allocate an additional \$2 million to the no-cost DHP pilot. Energy Trust has demonstrated that community partners are a viable mechanism for reaching energy-burdened customers with low and moderate incomes, which in itself is mandated by Commission-set performance measures. The Pilot has already helped hundreds of households and should be allowed to continue while Energy Trust develops a way to deliver it cost-effectively. Stakeholders appear to be either in support of or neutral toward Staff's recommendation.

PROPOSED COMMISSION MOTION:

Modify Order No. 22-024 to increase the budget cap for Energy Trust of Oregon's no-cost DHP pilot from \$5 million to \$7 million.