



2020 Annual Report

- 40 Water Heater Replacements
- 25 Nest E Thermostat Installs
- 3 DIY Attic Insulation Workshops
- 1 Focus Group in N/NE Portland
- 24 Low-Income Energy Audits
- 7 Cross-Promotion Events

Year in Review

At risk of cliché, 2020 was an unprecedented year. Community Energy Project's operations were disrupted with the transition to remote working due to the COVID-19 pandemic. Energy savings as a result of reduced employees commuting and our office's vacancy, were far outweighed by the social and economic injustices to the low-income, frontline communities that CEP serves. CEP saw these impacts on our clients and quickly embraced our role as an essential service to continue lessening the energy and health burdens.

With funding from CLEAResult and Energy Trust of Oregon, CEP finished a successful year of programming. We adapted marketing and outreach efforts to continue reaching communities of color and low-income households, which led to successes, such as installing a new record, **40 heat pump water heaters!** Each unit will save that household a conservative \$150 and 1,500 kWh of electricity annually. CEP taught **3 virtual workshops on do-it-yourself attic insulation** and developed content for a new suite of **educational tools around how to self-install a heat pump water heater**. We also installed **25 smart thermostats** and **audited 24 homes with Home Energy Scores**.

Finally, disruptions to on-the-ground work provided an opportunity for projections and planning. Funding support from CLEAResult enabled CEP to forge new partnerships, apply for complementary funding, and support other community based organizations. It also allowed CEP to explore and reflect on the data from our own clients. In one deep-dive analysis of Home Energy Score data, CEP found that low-income households are 3 times more likely to still heat with oil, and are overall, 15% less efficient than their neighbors. As you'd expect, those efficiency deficiencies were concentrated in older, lower performing furnaces and water heaters compounded by the lack of insulation in walls, attics, and crawl spaces. Projecting forward to a brighter 2021, CEP worked with CLEAResult to launch the Community Partner Funding programming. These new funds will lead to new opportunities in 2021 to serve clients with an enhanced energy audit, attic insulation, and more direct install services such as heat pump water heaters, ductless heat pumps, and smart thermostats.

2020 made it clear that we live in uncertain and changing times. CEP will continue to be on the frontlines of ensuring a just energy transition.

Sincerely,

Community Energy Project

Heat Pump Water Heater Direct Install Program

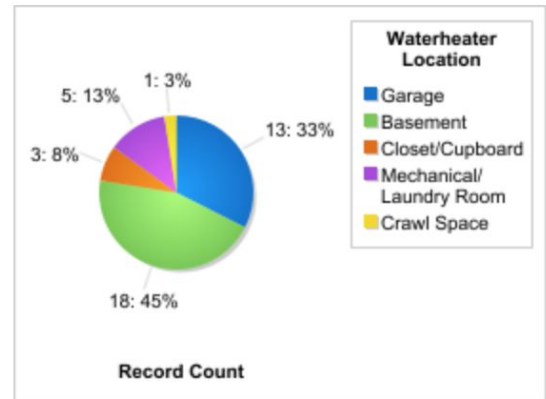
40 Heat Pump Water Heater Installations

120,000 kWh of electricity saved annually¹

\$12,000 in energy bill savings to CEP clients annually²

This program has been instrumental in helping CEP better serve our clients. After three years of running, CEP has replaced 97 inefficient, old electric water heaters through this program. The beneficial impacts of this program helped inspire CEP to utilize and seek outside funding to also help households that had existing gas water heaters, but could not be served with a HPWH upgrade. 2020 saw an additional 12 units installed with external funding. CEP believes there is continued expansion possible. The demand for this program only seems to be growing, we already have a waitlist of 11 clients to serve at the start of 2021.

HPWH Location

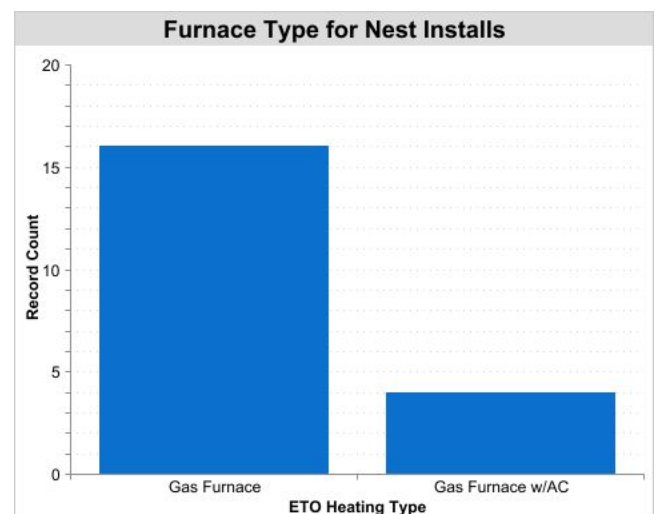


2020 brought converging crises, that of climate change, injustice, and a pandemic. The energy system weaves throughout all of these issues, and CEP is proud that this program helps low-income, frontline households reduce their climate impact. This mechanical upgrade helps homeowners avoid a large capital expense and it provides ongoing energy savings. This successful intervention reduces energy demand for the grid and energy burden for the client.

CEP continues to find households with old water heaters. This year's program found an average age of 19 years old, which was up from an average of 17 years old last year. We also found that our lower income clients earning between 0-50% MFI typically had older water heaters than those earning between than 50-80% MFI.

Heat Pump Water Heater Do-It-Yourself Install

CEP and Clearesult co-developed educational content related to installing heat pump water heaters, directed at technically savvy individuals and contractors interested in learning how to install. CEP worked with local installer, Great Northwest Installations, to replace Sherrie Villmark's existing unit.



¹ Based on average Energy Guide Label Difference between electric tank (~4,000 kWh/yr) and heat pump water heater (<1,000 kWh/yr)

² Based on simplistic utility rate of \$0.10/kWh.

Nest Thermostat Direct Install Program

25 Nest E Thermostats Installed

CEP's smart thermostat program was disrupted by the pandemic, and resulted in us installing fewer units than projected. A combination of employee and client risk factors resulted in us screening installs more intentionally.

All smartstats installed in 2020 were for gas furnaces, the majority of which did not have AC attached. One positive sign, despite the lower volume was fewer installs that did not work. This is a result of a combination of factors. One, CEP did outreach specific to Nest this year, and fielded calls from clients whose sole upgrade hope was a thermostat. Two, CEP's experience with last year's program helped us screen potential clients ahead of time, so that site visits more often resulted in a successful installation.

Do-It-Yourself Attic Insulation Workshops

COVID had a significant impact on workshops, as they could only be held online and our greatest partners (tool libraries) were closed the majority of the year, and volunteer positions suspended. CEP completed three Do-It-Yourself Attic Insulation Workshops in 2020, with seven people signing up for workshops and 3 people participating. In each workshop, CEP promoted ETO Savings Within Reach cash incentives, particularly those for do-it-yourself attic insulation. We also informed participants about other CEP and ETO programs including heat pump water heater and smart thermostat offers.

October 21, Virtual Workshop, 1 participant

November 14, Virtual Workshop 2 participants

December 8 , Virtual workshop, 0 participants

Low-Income Home Energy Scores

24 Number of Homes Scored

3.5 Average Home Energy Score

1,386 Average Conditioned Square Footage

58% Average Cost-Effective Energy Savings Opportunity

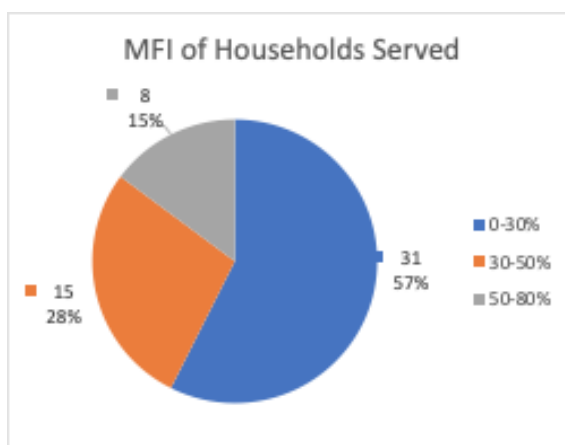
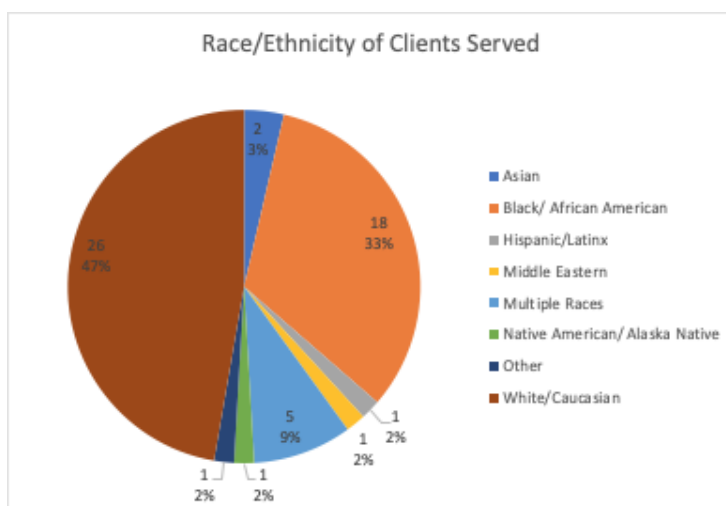
The homes that CEP scored in 2020 were notably lower than than the city-wide average of 4.5. Since, the score is based on total consumption, this suggests there is a higher incidence of inefficiencies present in our clients' homes, despite their smaller square footage. In 2020, CEP leveraged the data and analysis tools provided by the Home Energy Score and by the recently implemented community partner funding audits to identify homes in need of efficiency improvements. This list has been used extensively for the replacement of hot water heaters. The data was also used to build our proposal for funding by the Portland Clean Energy Fund. We used 20 households and found that greater than 50% savings were available across the portfolio with deep energy retrofits. If our proposal is successful this dataset will have been instrumental in our success.

CEP is excited about the opportunity to use the new Community Partner Funding Audit as an ongoing tool to help communicate the energy efficiency opportunities for our clients. We will continue to advocate for funding to invest in our communities as a result of the information we learn from these audits.

Customers Served

CEP served a diversity of low and moderate income households, many of which are people of color, seniors, and/or people with a disability. In 2020, CEP provided Home Energy Scores and direct installs for low-income rental agencies including PCRI and Rose CDC. For clients served by this program:

- 53% identified as people of color
- 85% earn 50% of median income or lower
- 55% were older than 65 years of age
- 64% of households had someone experiencing disability
- 5% of clients were veterans
- 78% were female



New Opportunities

CEP spent much of 2020 pursuing new opportunities as the pandemic transitioned much more of people's time to the computer and less to individuals' homes. Overall, we had a successful year in advocating for our programs and received new grants from Meyer Memorial Trust, 99 Girlfriends, Electrify Now, and prepared many more that are either smaller or still pending. The importance of Climate Justice related work spoke loudly and clearly to many organizations this past year.

CEP also dedicated significant time to meeting with and continuing to develop relationships with other community based organizations in Portland. CEP directors spent an increased amount of time on advocacy and policy related work, and due to grant funding were able to hire a brand new position of Climate Justice Associate. Additional to those relationships in the community and region, CEP supported and on multiple applications for Portland Clean Energy Fund grants as subcontractors.

Finally, as mentioned above, CEP used previously supported time from ETO to apply for our own PCEF grant. If successful, a year one program would significantly increase the scope and depth of the energy savings we can bring to our low-income, frontline clients. Whether successful in year one or not, CEP aspires to continue growing our programming via relationships with partners and persistent pursuit of funding that advances our mission.

Data and Reporting

CEP utilized funds from this contract to invest time in our internal data and reporting. This manifested itself in reports back to ETO on progress. We also built internal tools to track contract progress and effectiveness at reaching target populations.



The screenshot to the left shows some of the ways we tracked water heater installations in 2020. Graphs represent installs by stage, utility, age, location, MFI, geographic region, and race. CEP will continue to build out tracking tools for future thermostat and attic insulation work as supported by the Energy Trust of Oregon.

Additionally, CEP began to analyze Home Energy Score data shared with permission from Earth Advantage. CEP was able to segment out the data from low-income scores completed by CEP and make conclusions about conditions of low-income households compared to average homes across the city of Portland. We aspire to continue this work in 2021, with a newly updated dataset as provided by Earth Advantage.

High level findings from our data analysis demonstrate that low-income homes have a 15% higher energy use intensity leading to more energy cost despite homes being 300 square feet smaller. Overall, the low-income homes we surveyed had

oil heat at 3x the frequency as homes scored through Portland real estate program.

Outreach and Customer Engagement

CEP did cross promotion for CLEAResult and ETO at weatherization workshops throughout the year. At over 50 workshops, we highlight the Energy Trust of Oregon and related CEP program offerings. CEP also conducted program specific outreach for the offers supported, including HPWH and smartstat installations. We saw a high rate of return on an initial mailer of 200 postcards, receiving multiple Nest and HPWH from those. Our newsletters reach almost 700 realtors and 6,300 clients, sponsors, and partners. CEP is also actively engaged on social media with a following of 784 people. In 2020, CEP directors and program managers presented at a number of webinars and conferences including, Northwest Environmental Business Council, NWECE Energy Efficiency Conference, Equity and Electrification Webinar, and Solar Oregon Panel.

Early on in the year, we completed an in-person community meeting with Black homeowners in N/NE Portland. Many of these clients continue to stay engaged and have taken CEP up on program offerings. Additionally, those households are prioritized for PCEF program participation.