

Cooling Portland

Program Profile

Creating Safe and Comfortable Homes in the Pacific Northwest

The city of Portland created the [Cooling Portland](#) program in response to a 2021 heat wave that rocked the Pacific Northwest and killed many residents of Oregon. The program, launched in 2022 to create comfortable and safe living conditions for Portland's at-risk residents, is implemented by the Portland Clean Energy Community Benefits Fund (PCEF) and run by [the City of Portland's Bureau of Planning and Sustainability](#) and [Earth Advantage](#). Low-income Portland residents who meet at least two of the following risk factors are eligible for Cooling Portland's services: 1) are more than 60 years of age, 2) have medical conditions that increase risk of heat-related illness, or 3) are living alone.

The program's services are available to eligible homeowners, renters, and multifamily units. Cooling Portland distributes and installs efficient portable heat pumps and other cooling equipment in Portland homes, including traditional air conditioning window units as well as free-standing appliances that transfer hot air outside via hoses.

Earth Advantage is a nonprofit focused on developing an informed and humane housing market. It serves as the program implementation manager, identifying high-efficiency heat pump and air conditioning units, purchasing those units, and distributing them to the program's Community Distribution Partners (CDPs). CDPs identify and prioritize Cooling Portland recipients, schedule deliveries, provide installation services, and distribute educational materials. The program includes two categories of CDPs: housing provider organizations and community-based organizations (CBOs) that provide services other than housing.

CDPs also determine ownership of the installed units. Typically, renters and homeowners own the units and can take them if they move. However, some housing providers own the units and require tenants to sign an agreement to leave the units when they move out. Beyond their

Fast Facts

Program scope: Distribution and installation of efficient portable heat pumps and cooling equipment to vulnerable populations.

Communities served: Low-income Portlanders, prioritizing vulnerable populations, including those over 60 years of age, have medical conditions that increase risk of heat-related illness, and/or are living alone.

Funding: Portland Clean Energy Community Benefits Fund.

Key partners: Earth Advantage, Community distributions partners (CDPs)

Promising practices: Community Distribution Partners, diverse outreach strategies, consistent funding through the city's Portland Clean Energy Community Benefits Fund.



Cooling Portland roles, some CDPs offer additional support services. For example, one CDP, [Verde](#), runs a home energy efficiency program that can be made available to Cooling Portland recipients if they apply.

Community History

Officially incorporated under its name in 1851,¹ the early City of Portland was a busy port city and railroad hub. In recent years, the city has received national attention for protests against racial injustice and police brutality. Recognition of Portland's [history of racial and social injustices](#) has played a part in the creation of programs like Cooling Portland, which helps address environmental justice issues faced by some of the city's communities.

Today, Portland, like many parts of the United States, faces threats from climate change that exacerbate existing environmental justice concerns. In June 2021, the Pacific Northwest experienced a record-breaking heat wave. Temperatures in Portland soared to a high of 116 degrees Fahrenheit.² Nearly 100 Oregonians died due to this extreme heat—including 70 deaths in Multnomah County, which encompasses Portland.³ This event was the deadliest documented natural disaster in Multnomah County's history and spurred the creation of the Cooling Portland program. According to [Cooling Portland's Year 1 report](#), a significant portion of the program's heating and cooling installations have been performed in East Portland. This part of the city is very diverse and historically has been defined by low-income households. According to PCEF staff, East Portland also has noticeably less tree cover than other parts of the city, creating a heat island.

Community Engagement

In 2022, Oregon passed [Senate Bill 1536](#), which grants renters the right to use cooling devices, and helped inform the types of equipment Cooling Portland provides its recipients. The bill guarantees the rights of renters to install portable cooling devices, as long as they do not violate building codes or damage the building in any way. This legislation solidified portable air conditioning and heating units as the best suited equipment for Cooling Portland.

¹ Meagan Cuthill, 2022. [Portland then and now: A look back at the city's history on the anniversary of its incorporation](#).

² Monice Samayoa, 2022. [Pacific Northwest heat wave was a freak, 10,000-year event, study finds](#).

³ City of Portland, Oregon, 2023. [Cooling Portland: A PCEF-funded climate resilience program](#).



Although Senate Bill 1536 significantly influenced the types of equipment Cooling Portland installs, the program also turned to its community partners for input. With recommendations from its CDPs, PCEF and Earth Advantage staff developed minimum specifications for high-efficiency heat pumps and air conditioning units based on multiple factors, including feedback from prospective CDPs, energy efficiency goals of PCEF, and unit availability limitations.

The program's CDPs also lead outreach to Portland communities and reach prospective applicants through strategies such as community events, flyers, and word-of-mouth promotion. Through their direct communication with the program's recipients, CDPs are able to report feedback to PCEF staff. Participant feedback has included translation needs for installation and maintenance materials and services, and a need for a variety of installation equipment for different window types. The program is working to address this feedback, and now provides different types of heating and cooling systems, including traditional window units, as well as free-standing units.

PCEF staff have also amended their marketing strategies based on input from program applicants and recipients. Some applicants mistakenly thought Cooling Portland was an emergency response program, applying when they were in urgent need of cooling units and expecting services to be delivered immediately. Cooling Portland has revised its marketing campaign language to prevent this misunderstanding. PCEF staff do not want residents to wait to apply for assistance until they are in desperate need of heating and cooling equipment, as it takes time to approve applicants, order equipment, and schedule and provide installation services.

Key Partners

Earth Advantage and Cooling Portland's CDPs are invaluable to the program. PCEF staff selected Earth Advantage, with approval from Portland's City Council, to manage program implementation. In addition to its tasks of researching, purchasing, and distributing high-efficiency heat pumps and air conditioning units to Cooling Portland participants, Earth Advantage is also responsible for managing CDPs to ensure the program runs efficiently and effectively. While PCEF provides funding and high-level oversight of the program, Earth Advantage runs Cooling Portland's day-to-day operations.



Cooling Portland launched with 11 CDPs and continued to onboard more after its first year, including 5 new CDPs in 2023.⁴ Today, the program’s community-based organization partners include [African American Alliance for Homeownership](#), [APANO](#), [Ecumenical Ministries of Oregon](#), [Latino Network](#), [Native American Youth and Family Center](#), [Northwest Native Chamber](#), [Somali American Council of Oregon](#), and [Verde](#). Its housing provider partners include [Cascadia Behavioral Healthcare](#), [Central City Concern](#), [Home Forward](#), [Innovative Housing](#), [Northwest Housing Alternatives](#), and [REACH CDC](#). Each CDP is responsible for identifying program recipients and promoting the program, scheduling deliveries, and installing heating and cooling units. CDPs also educate program recipients on their new heating and cooling units and provide QR codes that support troubleshooting.

Funding Mechanism

Cooling Portland is funded by PCEF, a city government fund passed by Portland voters in November 2018. PCEF collects a 1 percent surcharge from businesses that make both \$1 billion nationally and \$500,000 locally each year.⁵ This fund provides a consistent source of funding for the City of Portland’s Bureau of Planning and Sustainability PCEF programs, including Cooling Portland. The fund was established to create green jobs, fund renewable energy and energy efficiency improvements to homes, and to support local businesses.

PCEF has provided a constant and sufficient source of funding to Cooling Portland. The program launched with the goal of distributing 15,000 cooling and heating units in its first five years, and has installed over 7,000 units in the first two years.⁶ This funding covers the entire cost of purchase and installation of heating and cooling units, so no financial burden is placed on homeowners or renters. Earth Advantage purchases these units through a grant agreement, and CDPs then request units from Earth Advantage. Once CDPs record successful installations, they are reimbursed for the installation costs: CDPs that are housing providers receive \$250 per installed unit and CDPs that are CBOs receive \$400 per installed unit.⁷ The program’s CBO partners are paid more for installation, as their processes can be more complex and require more time than those of housing provider partners. Unlike housing providers, which often have maintenance staff on-site, CBOs largely have to travel to their recipients for installation.

⁴ Jaimes Valdez, Portland Clean Energy Community Benefits Fund, 2023. Personal Communication.

⁵ Portland Clean Energy Community Benefits Initiative, 2019. [Clean Energy Surcharge](#).

⁶ Jaimes Valdez, Portland Clean Energy Community Benefits Fund, 2023. Personal Communication.

⁷ Jaimes Valdez, Portland Clean Energy Community Benefits Fund, 2023. Personal Communication.



Program Impact

Overall, the primary goal and metric of Cooling Portland is to improve public health and resilience, with energy efficiency being a secondary goal. The program aims to improve public health by stabilizing indoor temperatures and by enabling residents to keep their windows closed during wildfires, reducing the impacts of smoke inhalation. The program installs energy-efficient equipment to reduce environmental impacts and energy costs. Additionally, the program connects eligible households to other programs that can help reduce monthly energy bills, including the [Portland General Electric \(PGE\) Income-Qualified Bill Discount \(IQBD\) program](#).

Although the program is not tracking any specific goals to measure energy efficiency or improvements to public health, Cooling Portland tracks its impact in other ways. As mentioned above, Cooling Portland is projected to surpass its five-year goal and the program met its two-year goal in Fall 2023, installing over 7,000 total heating and cooling units.⁸ Additionally, the program tracks its impact on Portland's workforce by reporting the hours worked and wages of people installing heat pumps and cooling units for its CDPs.

Cooling Portland has also sought feedback from its CDPs to strengthen its goals and increase its impact. Based on this feedback, as well as internal analysis conducted by Earth Advantage, the program is working to increase its number of CDPs, increase the number of annual installations, centralize recipient intake registration to

“Me and my mom live in northeast Portland, in an older home that doesn't have central air and we didn't have an air conditioner. I reached out to the African American Alliance for Homeownership. They were quick to respond to my request to be a part of the [Cooling Portland] program and to receive an AC unit for my mom. My mom has benefited greatly from this program. She was able to stay cool during the unexpectedly hot summer months. Before she received the AC unit, she would go over to relatives' homes who have AC when it was too hot in our home. We are grateful for the AC unit provided from African American Alliance for Homeownership through Cooling Portland.”

– PCEF Unit Recipient from African American Alliance for Homeownership

⁸ Jaimes Valdez, Portland Clean Energy Community Benefits Fund, 2023. Personal Communication.



avoid installation overlap between its CBO partners and housing provider partners. and maintain and update public dashboard of installations.

Barriers and Challenges

According to PCEF staff, the greatest challenge Cooling Portland has faced is managing community expectations. When the program launched, a common misconception was that it is an emergency response program. Members of the community expected thousands of cooling units would be distributed in the event of a heat wave or other weather-related event. However, as noted above, Cooling Portland requires time to verify eligible participants and to source and distribute equipment. Cooling Portland is a prevention program, rather than a response program, and aims to make households safer and more resilient ahead of extreme heat events.

Besides educating the public on the true nature of the program, Cooling Portland has faced challenges related to its CDPs. Capacity of CDPs has been a barrier to distribution of cooling units. Some of the program's smaller CBO partners have not had enough staff to ramp up this work and expand into new service areas. To address this limitation, some of the program's CDPs have been hiring new staff to oversee enrollment and installation for Cooling Portland.

Additionally, Cooling Portland applicants have not always known which CDPs to reach out to for services – for example some residents have been unsure whether to reach out to a local CBO or to their housing provider for services. In some cases, the program's CBO partners and housing provider partners have had overlapping jurisdictions, which is also something the program is working to remedy by centralizing its recipient intake process. Residential status has also proved confusing to applicants, as some Portland addresses are technically not within city limits. PCEF has created an address verification system to address this challenge and to help all of the program's CDPs guarantee the eligibility of residents.

Recommendations from the Field

PCEF staff explained that understanding community needs is the key to Cooling Portland's success. They designed the program intentionally, with the purpose of creating safe and resilient homes. Although Cooling Portland is run by the government, PCEF staff say the program is guided by the community. Not only was it born from the need to protect Portland residents from extreme weather, but it also works directly with the community through its CDPs. Cooling Portland's CDPs are vital to efficiently distributing heating and cooling systems to program recipients and they also provide a source of regular feedback.



Working so closely with community members, including trusted community-based organizations that serve as CDPs, has allowed the program to meet and surpass its goals. However, PCEF staff recognize that it takes time to build an effective and efficient program. They recommend that similar energy efficiency and public health programs allow themselves extra time to get started and to address any challenge or barriers that arise. Although programs like Cooling Portland are addressing urgent needs of their communities, careful design and implementation will ensure long-term success.

For More Information

- [Bureau of Planning and Sustainability: Cooling Portland](#)
- [PCEF Climate Investment Plan](#)