

PCEF

CLIMATE INVESTMENT PLAN

**Portland Clean Energy
Community Benefits Fund (PCEF)
Climate Investment Plan**

Amended December 11, 2024



THE BUREAU OF **PLANNING
& SUSTAINABILITY**

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Portland's Climate Investment Plan

Executive Summary

August 2023

Change happens when we come together.

Approved by voters in 2018, the [Portland Clean Energy Community Benefits Fund](#) (PCEF) invests in community-led projects that reduce carbon emissions, create economic opportunity, and help make our city more resilient as we face a changing climate.

In the next five years, PCEF will invest \$750 million in community-led clean energy projects and climate solutions like energy-efficient upgrades to make apartment buildings safer and more comfortable during extreme heat, and tree planting to increase shade in neighborhoods that lack tree canopy coverage. These investments help ensure our most impacted residents are prepared for a changing climate as we support the City's goal of net-zero carbon emissions by 2050.

Led by those who live it. PCEF is the first climate-fund measure created and led by communities on the frontlines of climate change. Broad support for the measure was built through the leadership of communities of color, trust and relationship building, and a diverse coalition of supporters.

A collaborative approach. As PCEF evolves, the program is guided by a deep commitment to community engagement, accountability, and prioritization of those most impacted by a changing climate. Community Grants are awarded for projects designed and implemented by community-based nonprofit organizations.

Opportunity through innovation. PCEF is designing and evaluating climate solutions and partnering with grantees and frontline communities in culturally informed and responsive ways. This unique combination of climate expertise and public engagement makes PCEF a world leader in climate action that is rooted in economic opportunity and racial justice.

Climate Investment Plan: Portland's commitment to climate justice

PCEF has already awarded more than \$145 million in grants that support communities most impacted by climate change and make Portland more resilient to a changing climate. In response to direction from Portland City Council in fall 2022, this Climate Investment Plan (CIP) was developed as a five-year roadmap to fund additional community-led clean energy projects and climate solutions.

The CIP is grounded in climate research, deep community engagement, and multiple rounds of input from residents, businesses, subject matter experts, government partners, and community organizations to ensure the proposed solutions address the needs of Portland residents most impacted by a rapidly changing climate. All programs are evaluated within PCEF's equity and climate framework, which considers benefits to frontline communities, community leadership, implementation feasibility, greenhouse gas (GHG) emissions reductions, and accountability.

PCEF priority populations

To ensure the City equitably invests in climate action, PCEF centers groups that have been historically under-resourced by sustainability, climate action, and clean energy programs. These groups include, but are not limited to, people with low incomes, people of color, and people with disabilities. These groups often have less access to the benefits of environmental investments, and at the same time, are more vulnerable to the negative impacts of climate-related events such as extreme heat, wildfire smoke, vector borne diseases, and flooding.

From 2023 to 2028, PCEF will award an estimated \$750 million across seven funding categories.



Energy efficiency and renewable energy: \$474 million.

Residential and commercial buildings account for 41% of carbon emissions in Multnomah County. By reducing these emissions, funded projects can support a healthier climate, improve air quality, boost household and business utility savings, and create more resilient community infrastructure.



Transportation decarbonization: \$128 million.

Transportation accounts for 42% of Multnomah County's carbon emissions, making community-driven efforts to transition to an equitable, clean transportation system an essential part of the strategy to meet the City's climate goals.



Green infrastructure: \$70 million.

Portland's urban tree canopy is a powerful tool for removing carbon from the atmosphere and working toward the City's 2050 climate goals. Planting and maintaining street trees in Portland's most heat-vulnerable neighborhoods can also increase shade, improve air quality, and protect wildlife habitat.



Climate jobs, workforce, and contractor development: \$41 million.

PCEF invests in training and apprenticeships to support a diverse and fairly-paid workforce and contracting community for jobs related to clean energy, transportation decarbonization, green infrastructure, and regenerative agriculture.



Regenerative agriculture: \$20 million.

Regenerative agriculture increases soil's ability to store carbon, naturally enhancing Portland's climate resilience while supporting community-based food systems and providing fresh, locally-grown produce.



Capacity building: \$15 million.

Nonprofit organizations focused on climate justice will access trainings and staff support to more effectively meet community needs and build more climate-resilient neighborhoods. This increased capacity is essential for grant recipients to advance PCEF and the City's climate goals.



Other carbon reducing projects: \$2 million.

This includes projects that do not fall under the other six funding categories but provide meaningful and measurable carbon reduction and benefit communities that experience disproportionate climate impacts.

The CIP includes greater detail of PCEF's funding framework for Community Grants and each strategic program that is included in the funding categories above. Along with policy actions that improve our transportation system, energy sources, and the built environment, this plan is one of the core strategies for reducing carbon emissions in the City of Portland.

Together, we are showing the world what it looks like for climate action to be rooted in economic opportunity and racial justice. When we invest in our communities, we invest in our future.

Revenue forecast

PCEF is funded through a 1% surcharge on the Portland sales of large retailers with \$1 billion in national revenue and \$500,000 in local revenue. Based on projections from the City of Portland’s Revenue Division, PCEF estimates \$750 million in funding available for 2023-2028. Actual collections will vary year-to-year based on economic conditions, the proportion of sales that are classified by taxable business entities as retail or wholesale, and the definition of taxable business entities and their tax liability.

Figure 1. PCEF beginning balance vs. annual and cumulative tax revenue

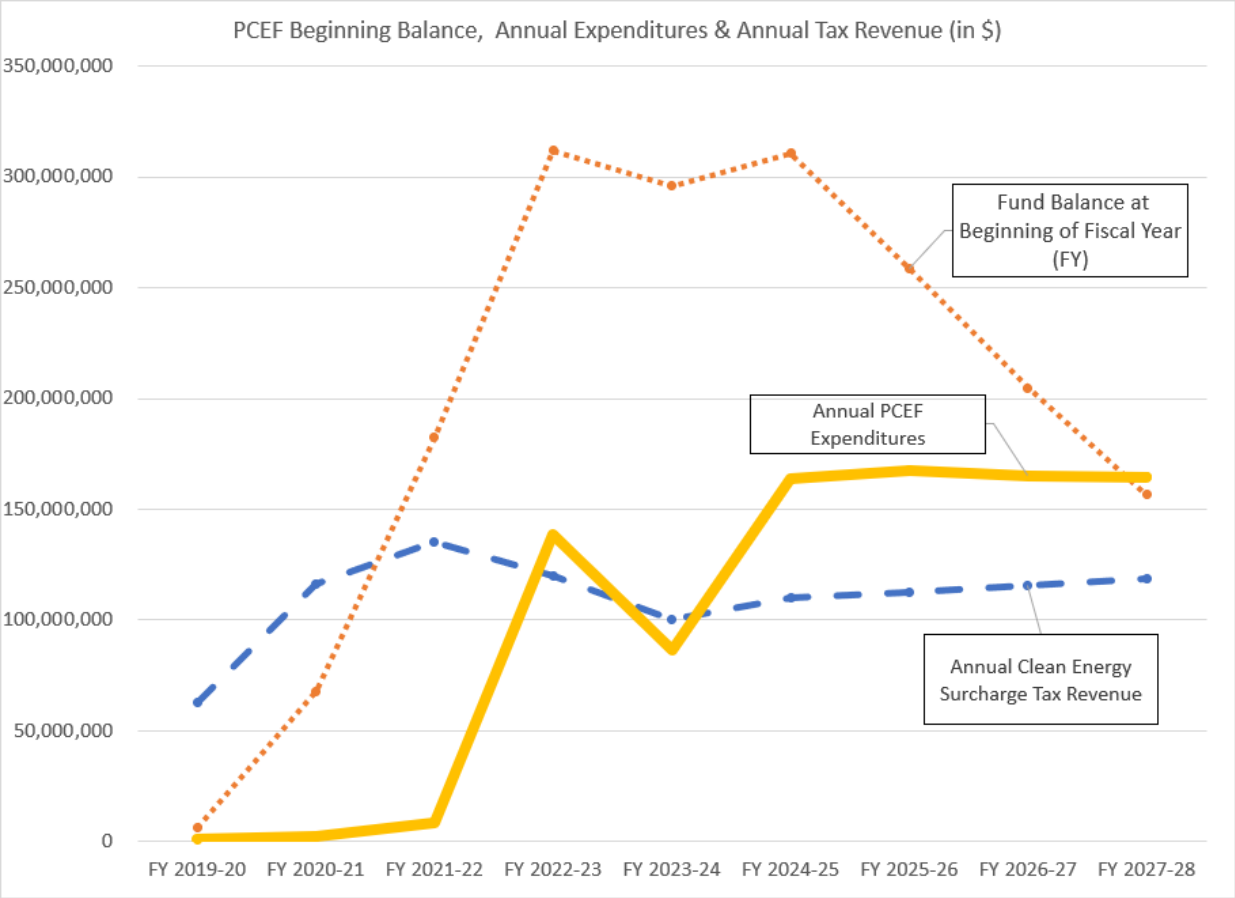


Figure 1 illustrates information on PCEF’s annual revenues, fund balance, and annual expenditures looking back to the start of the program and projected out for the duration of this CIP.

CIP purpose

The CIP was developed based on the PCEF Committee’s [guiding principles](#): to prioritize and allocate funding for community-led and informed climate action projects that benefit Portlanders most impacted by a rapidly changing climate. The CIP serves as a five-year roadmap for PCEF’s investments with clear outcomes and goals. Projects funded by PCEF must provide both climate and racial, social, and/or economic justice benefits.¹



¹Any provision of the Climate Investment Plan, or the CIP’s application to any person or circumstance, that is held or declared void, invalid or illegal will not affect any other provision or application of the CIP and the remainder of the CIP will continue to be in full force and effect.

CIP development approach

The following steps broadly outline the community engagement process informing the development of this CIP.

Step 0: *Leverage program history and experience to date.* Leveraged deep community engagement and lessons learned from developing and implementing two requests for proposals (RFP) soliciting over 300 applications and awarding and managing over 110 grants totaling over \$145 million.

Step 1: *Project overview and accessibility survey, January 2023.* Before launching efforts to write a plan, an accessibility survey assessed community participation barriers. [Responses to the survey](#) informed the design of the engagement and outreach process.

Step 2: *Community visioning and priorities, January to February 2023.* Residents, nonprofits, and subject matter experts shared their ideas on achieving major GHG reductions that advance racial, social, and climate justice at open houses and workshops.

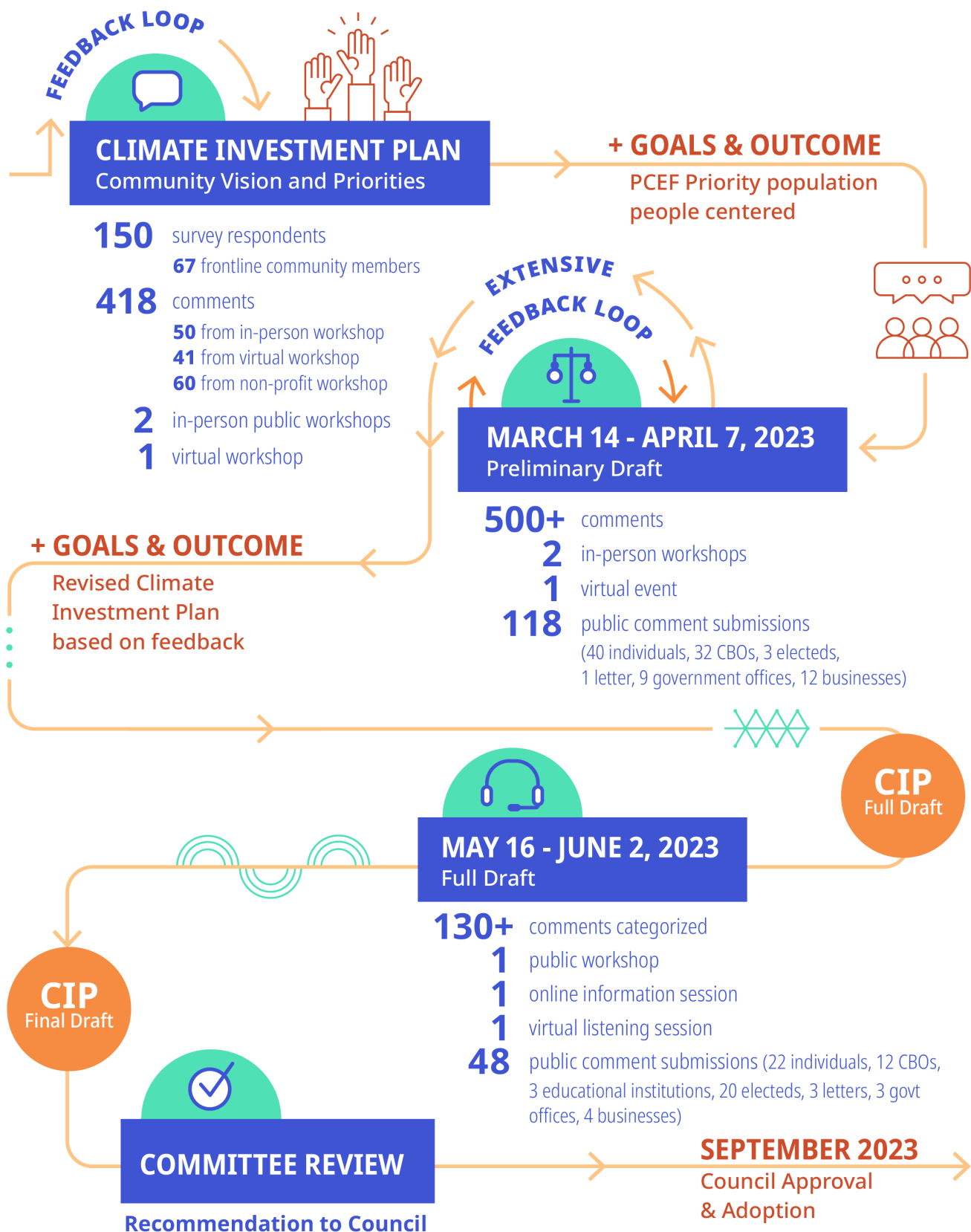
Step 3. *Preliminary draft, March to April 2023.* Using information collected from workshops, surveys, subject-matter roundtable discussions, community studies, research, and best practices, a preliminary draft of the CIP was made available for public review and comment. The preliminary draft contained proposed funding allocations, strategies, and goals. Public comments on the preliminary and full draft of the CIP can be found on [the PCEF website](#).

Step 4. *Full CIP draft, May 2023.* After considering comments from the preliminary draft, PCEF staff refined a full draft of the CIP and circulated it for public review and comment. The full draft contained more detail on program elements, including goals such as target carbon emissions reductions.

Step 5. *Committee deliberation, June and July 2023.* The PCEF Committee deliberated, made changes to, and recommended a final CIP to City Council.

Step 6. *City Council deliberation and approval, September 2023.* City Council deliberated and decided on the inaugural CIP.

Step 7. *Implementation of the CIP and reflection and evaluation townhall, fall 2023.* Following City Council approval, PCEF staff released a Community Grant solicitation and began implementation of strategic programs. A townhall was held to discuss how decisions were made during the CIP process and to collect recommendations for the next update of the plan.



Three funding pathways

PCEF funds projects and programs through three different pathways: Community Grants, strategic programs, and the tree canopy maintenance reserve.

- *Community Grants* are awarded for projects designed and implemented by community-based nonprofit organizations. These grants prioritize carbon emissions reduction and climate workforce training projects that are led by, and serve, communities living on the frontlines of climate change. PCEF had successfully launched two grant funding cycles under the Community Grants program, which have been publicly referred to as RFP 1 and RFP 2.
- *Strategic programs* are targeted programs designed with input from community members and subject matter experts. These programs are detailed in the CIP and may be implemented through partnerships with nonprofit organizations, government entities, or businesses. These programs are selected based on shared City and community priorities, carbon emissions reduction opportunity, timeliness, need, and social impacts.
- *Tree canopy maintenance reserve* is funding for the targeted long-term maintenance of tree canopy to ensure the sequestration of carbon emissions in a manner that aligns with PCEF's purpose.

The CIP defines the funding allocation for each pathway, which emphasize equity and climate in its framework. In selecting implementation partners, PCEF will prioritize organizations with a track record of successfully working with PCEF priority populations.

Equity + climate framework

From its days as a ballot measure to becoming a full-fledged City program, equity and climate action have been central tenets in PCEF's design and implementation. With the addition of strategic programs as a new pathway for funding PCEF projects and programs, an equity + climate framework is used to evaluate any strategic program for inclusion in the CIP. The five prompts below outline key elements of PCEF's equity + climate framework. A strategic program concept must answer all five prompts affirmatively to be considered for inclusion in the CIP. Exceptions include capacity building and workforce/contractor development which do not have direct GHG reductions.

- *Benefits to frontline communities.* Will the program create clear, significant, and measurable benefit to frontline communities?
- *Community leadership.* Are there meaningful opportunities for community members to participate in decision making and/or provide leadership in program implementation? Does the program invest in building capacity within communities most impacted?
- *Implementation feasibility.* Can the program be realistically implemented at scale with existing City staff, partners, or contractors over five years?

- *Climate impact: GHG reductions.* Will the program result in meaningful and measurable GHG reductions/sequestration?
- *Accountability.* Do accountability mechanisms exist to ensure that communities of color, low-income populations, people with disabilities, and other vulnerable communities benefit from the strategic program? Is this program additional to existing or planned efforts?

Building community in partnership

Our goal in creating a more climate resilient Portland is not only to address the immediate needs of those most impacted by climate change, but also to empower them to take leadership roles in designing and implementing solutions. PCEF recognizes the crucial role of communities of color and low-income people as frontline leaders in effecting change.

This approach has required PCEF to balance strategic program offerings that are designed to respond to immediate community needs with the long-term goal of growing community capacity. That's why community engagement and capacity building goals are woven throughout this plan and why they will be tracked during implementation.

Evaluation metrics that will be gathered for strategic programs and Community Grant programs include:

- *Number of organizations.* The number of community organizations and businesses working on PCEF projects or programs that reflect and serve priority populations.
- *Funding.* The amount of funding being allocated to community organizations, businesses, and government institutions. This will help us determine how financial resources are being distributed including which organizations are securing the financial resources necessary to build their capacity and implement programs.
- *Training and development.* The number of training and development opportunities offered. This can help determine if organizations and individuals have access to gaining skills and knowledge necessary to effectively address the climate crisis.
- *Partnerships.* The number of partnerships nonprofits are forming with government, the private sector, and with each other to implement PCEF-funded projects and programs. This can help determine if community organizations, businesses, and government institutions are building the necessary relationships to effectively implement climate change programs.
- *Community engagement.* The level of involvement of community members and organizations through planning processes including the CIP development process. This helps determine if community is building the necessary engagement and leadership capacity to sustain their efforts for the long-term.

Accountability: transparency, measurement, reporting, and evaluation

Accountability is an imperative for all PCEF programs and our mission to address climate change urgently and equitably. As the nation's first program of its kind, it is also critical that the CIP incorporates appropriate mechanisms to transparently share its process and progress. Performance measures track PCEF's progress towards its goals, and program evaluations assess its impact or improve results.

Collectively, we refer to the systems that support and reinforce the achievement of PCEF's goals as our measurement, reporting, and evaluation systems. All PCEF investments, whether Community Grants or strategic programs, will have defined measures or metrics, reporting requirements, and evaluation.

- *Transparency.* Climate change is a global crisis, so we are committed to sharing our progress openly so that other municipalities can learn from our efforts, and our local community has visibility to our investments and outcomes.
- *Measurement.* Each program contains key metrics with which to evaluate progress and success. A forthcoming PCEF Dashboard will be publicly accessible, tracking program metrics and empowering us to report the most current information on our efforts.
- *Reporting.* Program work plans will be developed and milestones for data reporting established. Each program has its own distinct timeline, so reporting may vary based on program implementation. A report will be issued annually to share:
 - How funds have been spent to date.
 - Progress on funded projects and programs.
 - The CIP's impact on addressing climate change.
 - How CIP investments support other City climate efforts, including the Climate Emergency Workplan (CEW).
 - Demographics that show who has directly benefited from PCEF CIP investments.
- *Evaluation.* PCEF and our partners will perform continuous evaluation to ensure that CIP goals will be on track in the five-year time frame, as well as collaborating with the broader CEW workplan efforts.

The PCEF Committee plays a crucial role in accountability. As representatives of the community, they will provide feedback, oversight, and perspective throughout CIP implementation. The Committee protects the purpose of the Fund, provides guidance when PCEF navigates competing demands, and balances action toward carbon reduction goals and community benefit.

Committee meetings will continue to be open to the public and livestreamed online, allowing maximum accessibility for the community.

Program-wide contractor and workforce equity approach and goals

There is a significant opportunity to ensure that climate action drives the creation of quality jobs and increases access to those jobs for people who have been historically marginalized in the workforce.

PCEF promotes the growth of diverse climate action-focused contractors (i.e., businesses) and workers to better reflect the diversity of our city. The program's workforce and contractor investments support projects that facilitate and promote job training, pre-apprenticeship programs, apprenticeship programs, and contractor development in businesses that produce goods or services that reduce or sequester greenhouse gases. This support for diverse contractors and workers will come through a range of organizations dedicated to this work including government, community-based organizations, culturally specific chambers of commerce, apprenticeship programs, labor unions, and other community resources.

PCEF invests and supports the diversification of contractors and workers focused on climate action in four primary ways:

- *Contractor and workforce utilization goals.* Utilization goals are an important tool for PCEF grantees and contractors to advance equity in professional and construction services contracts. It sets percentage thresholds for the participation of businesses certified by the Certification Office for Business Inclusion and Diversity (COBID) (or a defined alternative) as: Disadvantaged (D), Minority (M), Women (W), Emerging Small Business (ESB), or Service-Disabled Veteran-Owned Business Enterprises (SDVBE). Diverse contractor and worker utilization goals for this CIP are in [Appendix 1](#).
- *Contractor and workforce diversification grants and contracts.* Direct investment into organizations for climate-action related contractor and workforce development is an equally important means to growing and diversifying our workforce. This may include investing in pre-apprenticeship programs, green-building related training and certifications, or contractor training and support to increase clean energy service offerings. Direct investments also include upstream efforts that encourage youth to explore climate careers.
- *Reporting and wage requirements.* Reporting on contractor and workforce utilization provides data and information on those who work on PCEF projects. Reporting also provides information on wages to ensure that workers on PCEF projects are paid at least 180% of minimum wage, or prevailing wages, where applicable.
- *Worksite anti-harassment and culture change.* The fourth element to PCEF's contractor and workforce equity approach is a strategy for worksite anti-harassment and positive culture change to ensure that workers on PCEF projects, regardless of race, gender, or creed, are guaranteed a safe and respectful working environment. The strategy includes policies and trainings for workers on PCEF projects to provide safe and respectful worksites.

CIP in context

A recent study by ECONorthwest found that completing all clean energy and green infrastructure projects benefiting PCEF priority populations would require approximately \$18 billion.² This includes residential and small commercial (10,000 square feet or less) clean energy projects and tree planting to support the urban tree canopy; it does not include investments in transportation, larger commercial buildings, or workforce and contractor development. However, completing all projects to reach the city's residents and businesses would cost many times that figure.

PCEF and the CIP operate in a broader landscape of national, state, and local policy and funding solutions aimed at addressing climate change and social inequality. The CIP's strategic programs and Community Grant opportunities have the potential to support, leverage and connect with local, state, and federal policies and funding sources at a critical time. These efforts aim to lower the cost of cleaner technologies, encourage decarbonization in buildings and transportation systems, and promote local equitable economic development, among other objectives. The CIP is designed to complement and support the following efforts:

- The [Climate Emergency Workplan](#).
- State efforts centered around the [100% Clean Energy goals](#) and the [Climate Protection Program](#).
- Decarbonization efforts of regional partners including [Energy Trust of Oregon](#), and local utilities [Portland General Electric](#) and [Pacific Power](#).
- Prosper Portland's [Advance Portland](#) inclusive economic growth strategy.
- The federal [Inflation Reduction Act \(IRA\)](#) and [Bipartisan Infrastructure Law \(BIL\)](#).

² Portland Clean Energy Fund: Market Study Summary, June 2023 (<https://www.portland.gov/bps/cleanenergy/grant-committee/documents/pcef-market-study/download>)

SUMMARY OF DRAFT FUNDING ALLOCATIONS



by code funding categories

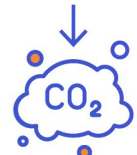


Table 1. Summary of draft funding allocations by code funding categories.

Primary code category	Community grant or strategic program (SP) name	Total 5-year funding allocation	Workforce & contractor development suballocation	Climate Emergency Work plan* actions that are directly or indirectly supported by the CIP
Climate jobs, workforce and contractor development (Page 21)	Community Grants - Youth Climate Careers Exposure	\$4,000,000	-	E-2, B-1, B-3, T-6, T-7, T-1**, T-3**
	Community Grants – Job Training and Contractor Support Initiatives	\$26,000,000	-	E-2, B-1, B-3, H-1, T-6, T-7, T-1**, T-3**
	Community Grants – Energy Efficiency and Renewable Energy	\$92,000,000	-	E-2, B-1, B-3, B-4, H-1, RH-2
Energy efficiency and renewable energy (Page 23)	SP 1: Clean Energy in Regulated Multifamily Affordable Housing	\$60,000,000	\$1,200,000	B-3, B-4, T-6, T-7, H-1
	SP 2: Clean Energy in Unregulated Multifamily Housing	\$50,000,000	\$2,000,000	B-1, B-3, T-7, H-1
	SP 3: Clean Energy Improvements in Single-Family Homes	\$140,000,000	\$3,500,000	B-3, T-7, H-1
	SP 4: Clean Energy in Small Commercial Buildings	\$25,000,000	-	B-1, T-7
	SP 5: Building Upgrades for Community Severe Weather Response	\$30,000,000	-	B-2, T-7, H-1, RH-1, RH-2, E-2
Transportation decarbonization (Page 38)	Community Grants - Transportation Decarbonization	\$35,000,000	-	T-1*, T-4, T-7
	SP 6: Comprehensive E-Bike Access and Support	\$20,000,000	\$600,000	T-1*, T-4
	SP 7: Equitable Clean Transportation Access	\$25,000,000	-	T-1*, T-4
Green infrastructure (Page 45)	Community Grants - Green Infrastructure	\$5,000,000	-	NR-2, NR-4
	Tree Canopy Maintenance Reserve	\$5,000,000	\$250,000	T-3**, NR-4
	SP 8: Equitable Tree Canopy	\$40,000,000	\$2,000,000	T-3**, NR-4
Regenerative agriculture (Page 50)	Community Grants - Regenerative Agriculture	\$14,000,000	-	LU-2
	SP 9: Increasing Access to Urban Regenerative Agriculture Opportunities - Planning and Land Acquisition	\$6,000,000	-	LU-2

Primary code category	Community grant or strategic program (SP) name	Total 5-year funding allocation	Workforce & contractor development suballocation	Climate Emergency Work plan* actions that are directly or indirectly supported by the CIP
Organizational capacity building (Page 52)	Community Grants - Mini Grants	\$1,000,000	-	E-2, B-1, B-3, T-1*, T-4, T-7, NR-2
	SP 10: Community-Based Organization (CBO) Capacity Building Program	\$10,000,000	-	E-2, B-1, B-3, T-1*, T-4, T-7, NR-2
Multiple funding categories/ other carbon emissions reducing projects (Page 57)	Community Grants - Other Carbon Emissions Reduction/ Sequestration Projects	\$2,000,000	-	S-1, S-2, S-3
	SP 11: 82nd Avenue Climate Infrastructure and Community Resilience Grants	\$5,000,000	-	B-1, T-7, LU-1, LU-2, T-2**, T-3**
	SP 12: 82nd Avenue Street Tree Expansion	\$5,000,000	-	LU-1, T-2**, T-3**, NR-4
	SP 13: Targeted Electric Vehicle Financing Tools	\$35,000,000	-	T-1*, T-8
	SP 14: Access To Fair and Flexible Capital	\$45,000,000	\$2,250,000	B-1, B-3, B-4, T-6, T-7, I-1
	SP 15: Federal Climate and Equity Funding Opportunities	\$20,000,000	-	All CEW actions
	SP 16: Climate-Friendly Public Schools	\$50,000,000	-	E-2, T-1*, T-2**, T-3**, T-7, NR-4, H-1, IP-1, E-4
Total		\$750,000,000	\$11,800,000	

T-1*, T-2*, and T-3* refer to actions in the CEW listed under Transportation in Decarbonization Priorities.

T-1**, T-2**, and T-3** refer to actions in the CEW listed under Trees (Canopy) in Resilience Priorities.

Table 1 summarizes the CIP’s five-year funding allocations by funding category and includes actions from the [CEW](#) that are either directly or indirectly supported by the CIP. While the table is organized based on each program’s *primary* funding category, many programs, including Community Grants and strategic programs, will invest in more than one PCEF funding category. For example, *SP 2: Clean Energy in Unregulated Multifamily Housing* primarily invests in energy efficiency and renewable energy but also has spending for transportation decarbonization (e.g., electric vehicle charging) and for workforce and contractor development (see Table 2 below).

Table 2. Example of multiple funding categories within strategic programs, *SP 2: Clean Energy in Unregulated Multifamily Housing*.

Total five-year funding allocation	\$50,000,000	% of total
Energy efficiency and renewable energy	\$45,500,000	91%
Transportation decarbonization	\$2,500,000	5%
Workforce and contractor development	\$2,000,000	4%

Spending aggregated across programs for the total amount invested in each of the funding categories:

- Energy efficiency and renewable energy - **\$474 million.**
- Transportation decarbonization - **\$128 million.**
- Green infrastructure - **\$70 million.**
- Regenerative agriculture - **\$20 million.**
- Workforce and contractor development - **\$41 million.**
- Capacity building - **\$15 million.**
- Other carbon reducing projects - **\$2 million.**

Figure 2. Aggregated investments across PCEF’s code funding categories.

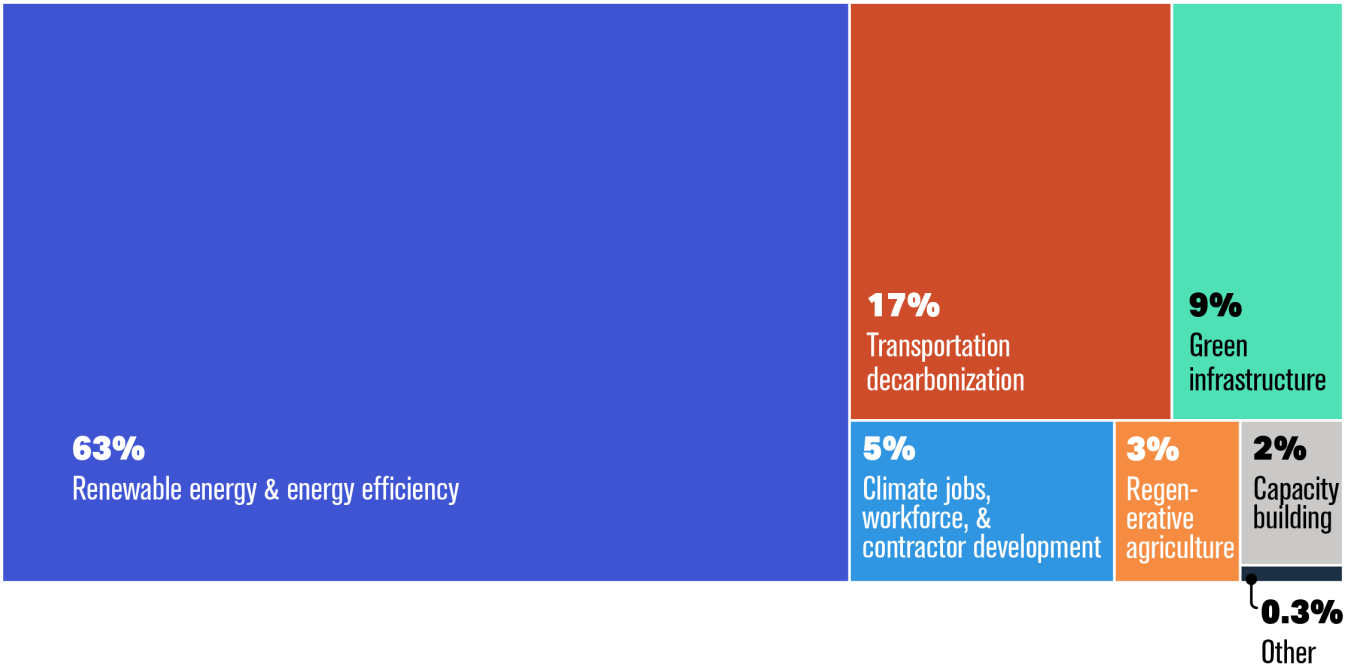


Figure 3. Allocation of funds between the three funding pathways: Community Grants, strategic programs, and tree canopy maintenance reserve.



PCEF code funding categories



Climate jobs, workforce, and contractor development

With increases in funding for climate action driven by PCEF and the IRA, there is substantial opportunity for climate action-focused workforce and contractor (i.e., business) development. PCEF’s funding of climate projects and our investments in workforce and contractor development will create career pathways and increase access to green jobs for historically marginalized workers and contractors to support a more climate-friendly and resilient Portland.

In addition to the direct investments in climate-action related workforce development and contractor support listed below, funding for climate-action related workforce development and contractor support is woven through multiple programs within the CIP.

The following table summarizes proposed investments in workforce development and contractor support through both Community Grants and strategic programs.

Table 3. Funding allocations – climate jobs, workforce development, and contractor support.

Climate jobs, workforce development, and contractor support investments		Five-year funding allocation
Community Grants	Youth Climate Career Exposure	\$4,000,000
Community Grants	Job Training and Contractor Support	\$26,000,000
Strategic program	SP 1: Clean Energy in Regulated Multifamily Affordable Housing	\$1,200,000
Strategic program	SP 2: Clean Energy in Unregulated Multifamily Housing	\$2,000,000
Strategic program	SP 3: Clean Energy Improvements in Single-Family Homes	\$3,500,000
Strategic program	SP 6: Comprehensive E-Bike Access and Support	\$600,000
Strategic program	Tree Canopy Maintenance Reserve	\$250,000
Strategic program	SP 8: Equitable Tree Canopy	\$2,000,000
Strategic program	SP 14: Access to Fair and Flexible Capital	\$2,250,000

Community Grants – Workforce and Contractor Development

TOTAL FIVE-YEAR FUNDING ALLOCATION: \$30,000,000

Workforce and contractor development-focused community grants are intended to support investments in:

- Oregon Bureau of Labor & Industries (BOLI)-registered pre-apprenticeship programs: HVAC technicians, weatherization technicians, electricians, plumbers, and other trades that work on climate action.
- BOLI-registered apprenticeship programs: residential heat pump technicians and weatherization technicians.
- Certifications: for arborists, solar panel installers, wind technicians, HVAC technicians, weatherization technicians, and energy auditors.
- Youth climate career education and exposure initiatives: for programs in fields like renewable energy, sustainable agriculture, or transportation planning; and internships with companies that are at the forefront of the sustainable economy.
- Contractor development: for mentorship and training, access to capital, and business and technical assistance to increase climate action related product and service offerings.

A portion of this funding may be administered by another government entity based on the availability of complementary services that enhance program delivery in alignment with the purpose of this funding category.

GOAL MEASURES FOR COMMUNITY GRANTS

- 1,000 low-income and youth of color provided with climate career exposure and education.
- 700-900 of workers trained for work in clean energy, transportation decarbonization, green infrastructure, or regenerative agriculture.
- 75-125 contractors supported in starting, pivoting to, or expanding work in clean energy, transportation decarbonization, green infrastructure, or regenerative agriculture.





Energy efficiency and renewable energy

Investments in energy efficiency and renewable energy will be made through community grants and through five strategic programs. Each of the strategic programs serves a distinct group of buildings and/or owners that have different barriers and opportunities for reducing GHG emissions and benefiting PCEF priority populations.

As residential and commercial buildings account for 41% of carbon emissions in Multnomah County, and reducing energy usage provides direct benefit to local businesses and low-income Portlanders, the primary focus of PCEF's clean energy funding is investments in buildings. Reducing building emissions supports a healthier climate and improves air quality, boosts household and business utility savings, and creates more resilient community infrastructure.

In all areas of energy efficiency and renewable energy, PCEF aims to assure high quality work that reduces GHG emissions and benefits frontline communities.

- None of the clean energy programs, except for *SP 5: Building Upgrades for Community Severe Weather Response*, allow PCEF funding to be invested in equipment or appliances that use fossil fuels.
- All clean energy programs include third-party quality assurance.
- Many strategic programs have funding allocated to support targeted workforce and contractor training, pathways for career advancement, contractor capacity building, and mentorship for implementation partners.
- Except new and redeveloped regulated multi-family affordable housing (SP 1), up to 30% of the construction budget for each building may be used for health, safety, accessibility, or enabling repairs. The remaining 70% must be used for energy improvements.
- For the unregulated multifamily (SP 2), single family (SP 3), and small commercial (SP 4) strategic programs, and for Community Grants in existing buildings, if match funding is available and the total project cost (PCEF funds + match funds) meets the requirement of at least 70% of total construction budget going into energy improvements, then up to 50% of PCEF funding can be used for health, safety, accessibility, or enabling repairs.

Community Grants - Renewable Energy and Energy Efficiency

FIVE-YEAR FUNDING ALLOCATION: \$92,000,000

Energy efficiency and renewable energy-focused community grants are intended to capture investments in:

- Community solar.
- Targeted/culturally responsive single-family home clean energy upgrades performed by organizations improving less than 50 units per year.
- Clean energy upgrades in existing regulated multifamily affordable housing.
- Clean energy improvements in nonprofit owned/occupied commercial buildings.
- Other renewable energy and energy efficiency investments that reduce GHG emissions, advance racial and social justice, and do not fall within one of the strategic programs defined below.

GOAL MEASURES

- 47,000 - 60,000 metric tons (MT) lifetime CO2e emissions reduced.^{3,4}

Table 4. Strategic programs – renewable energy and energy efficiency.

Strategic program name	Five-year funding allocation
SP 1: Clean Energy in Regulated Multifamily Affordable Housing	\$60,000,000
SP 2: Clean Energy in Unregulated Multifamily Housing	\$50,000,000
SP 3: Clean Energy Improvements in Single-Family Homes	\$140,000,000
SP 4: Clean Energy in Small Commercial Buildings	\$25,000,000
SP 5: Building Upgrades for Community Severe Weather Response	\$30,000,000

³ GHG reduction is calculated by estimating the number of each type of project that is outlined in the program description. Calculations are aligned with strategic programs when possible. GHG reductions will be managed across the portfolio of Community Grants to meet the goal.

⁴ Weighted emissions factor for Portland developed with 2021 utility data from the Department of Environmental Quality and annual sales reporting, then scaled up to account for line losses. Assumed emission factors linearly reduce to zero in 2040 as a result of [HB 2021 \(2021\)](#).

Strategic Program 1: Clean Energy in Regulated Multifamily Affordable Housing

FIVE-YEAR FUNDING ALLOCATION: \$60,000,000

DESCRIPTION

The City of Portland is adding more than 1,700 multifamily affordable housing units in the next five years. This housing will remain affordable for 30 to 99 years, and the buildings are likely to be in use for even longer. It is imperative that these buildings are built and operated in a way that reduces carbon emissions, reduces operating costs, and improves resilience and health for tenants. Carbon-reducing measures are assured in project budgets by having this dedicated source of funding.

The program, one of [two fast tracked programs](#) in the CIP, is divided into two phases. Phase I are projects with financial close in the near term. Because Phase I projects are far along in their development process, there are fewer opportunities to impact design and contracting decisions. Requirements for these projects align with standard requirements for Portland Housing Bureau (PHB)-funded projects with the addition of energy usage modeling and reporting for PCEF funded measures.

PCEF is working with PHB and other community partners to define Phase II program parameters to see greater carbon reduction, benefit to tenants, and additional or different workforce and contractor equity requirements. Phase II projects will include those that have financial closing 12 months or more from the date when the program design is complete.

OUTCOMES

- Publicly subsidized affordable housing will be built to high-efficiency, low-carbon, resilient standards.
- Reduced operating costs for regulated affordable housing.

GOAL MEASURES

- **Phase I** - These housing projects are well into development and have largely finalized design. Each project is being assessed for specific carbon reduction opportunities that will work within the existing design. For this reason, PCEF is not estimating CO₂e emissions reduction for Phase I.
- **Phase II** – Improve energy usage in an estimated 800 units of regulated affordable housing, resulting in an estimated 3,400 - 5,700 MT lifetime CO₂e emissions reduction.⁵

⁵ Based on energy savings data to code from Energy Trust of Oregon's New Buildings Program Evaluation (2017), and modeled savings from Phase I projects and assumes an 80% attribution of above-code savings to PCEF.

INVESTMENT STRATEGY

Over five years, PCEF will invest up to \$60 million in clean energy upgrades in new or redeveloped regulated multifamily affordable housing. Roughly half of funding is anticipated to be awarded to projects in Phase I and the remaining half in Phase II. These funds are available to all new or redeveloped regulated multifamily affordable housing that is 20 units or larger within the city of Portland.

ELIGIBILITY FOR ADMINISTRATION

- Funds awarded in Phase I will be disbursed through PHB.
- Administration eligibility for Phase II has not yet been determined and may also be awarded through PHB.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

- Phase I projects will comply with standard PHB workforce and contractor equity requirements.
- Phase II projects may have additional requirements including Safe and Respectful Jobsite training, distribution of PCEF specific worker rights information to workers on projects, and utilization goals that align with those adopted by the PCEF program. See Appendix A.

Allocation: \$1,200,000

Workforce and contractor development investment outcomes and goals include:

- Improved rate of contractors meeting or exceeding diverse utilization and apprentice goals.
- 200-300 workers trained on green building and equipment installation.



Strategic Program 2: Clean Energy in Unregulated Multifamily Affordable Housing

FIVE-YEAR FUNDING ALLOCATION: \$50,000,000

DESCRIPTION

There are roughly 58,000 households in Portland earning less than 80% Area Median Income (AMI) and living in multifamily housing. Around a quarter of these households can access regulated affordable housing; the remainder live in unregulated multifamily rentals (sometimes called naturally occurring affordable housing). Black and Indigenous households have the highest rates of rentership by race in Portland and lower than average median income.

This strategic program's goal is to provide clean energy improvements in 2,500 existing unregulated multifamily rental units. The program is intended to accelerate climate projects in this sector of the housing market, generating carbon emissions reduction and financial and health benefits for renters with low income.

Multifamily rentals have been historically difficult to access for clean energy programs. Property owners may be reluctant to participate because of barriers related to complexity and insufficient incentives.

The program is designed to address four key barriers:

- Property owners don't usually pay the utility bills. When they do, they can pass on costs to tenants, resulting in a lack of financial incentive to reduce energy use.
- Property owners have limited time and/or may not understand the benefits of energy improvements.
- Property owners have found existing programs complex to navigate and with requirements they are unwilling to accept.
- Tenant income verification is difficult and can create privacy issues.

These barriers will be addressed through:

- Robust investment in targeted marketing and outreach.
- Project management.
- Offering opportunities for significant investment in properties with limited match requirement.
- Allowing 30% of PCEF funds to be used for life, health, and safety upgrades which are likely known to the property owners.
- Determining eligibility based on a range of rents charged.

Program requirements will be designed to reduce energy consumption and minimize potential for tenant displacement.

Core program elements:

- Projected \$15,000 average PCEF investment per unit. For example, a fourplex could receive \$60,000 in energy improvements.
- 25% match and a minimum three-year rent-stability agreement will be required.
- Investments will be scaled based on the length of the agreement up to nine years.
- Property owner match can be from any source including utility, state, and federal programs as well as PCEF supported or other finance products.
- Eligible clean energy measures will be informed by an energy assessment and will target systems with high GHG and utility bill savings including heat pumps, hot water heating systems, and the building envelope.
- Renewable energy will be considered when accompanied by a comprehensive energy efficiency scope.

OUTCOMES

- Tenants see utility cost reductions along with increased comfort and livability in their homes.
- Rent stabilized in all participating units for three to nine years.

GOAL MEASURES

- 2,500 multifamily units receiving moderate to major energy retrofits resulting in projected 4,000 - 5,000 MT lifetime CO₂e emissions reduced.⁶
- 20% tenant energy bill reduction.

INVESTMENT STRATEGY

Over five years, PCEF will invest \$50 million in clean energy measures in unregulated rentals. Year one will target 30% of annual volume and will ramp up to full capacity by year three. Scaled investment will depend on length of rent-stability agreements, with an average PCEF investment of \$15,000 per unit.

ELIGIBILITY FOR ADMINISTRATION

Who may apply:

- Nonprofit organizations.
- For-profit organizations.

⁶ Savings based on Energy Trust of Oregon deemed savings and calibrated to savings from similar programs in other jurisdictions such as California's Low Income Weatherization Program.

Must provide the following program needs:

- Coordinating administrator.
- Tenant outreach and engagement.
- Property owner outreach and engagement.
- Program sales and marketing.
- Technical assessment.
- Energy project management.

Partnerships will be encouraged. PCEF will select 1-3 coordinating administrators and may consider additional contracts for tenant engagement and education.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

In addition to program-wide workforce and contractor goals and requirements, this strategic program has additional program-specific investment described below.

Allocation: \$2,000,000

Workforce and contractor development investment goals include:

- 350-400 workers trained on green building and equipment installation.
- 5,000 hours of building science technical mentorship for contractors.
- Retention awards to support employment for up to 50 new workers.



**“Residential and commercial buildings
account for 41% of carbon emissions
in Multnomah County.”**



Strategic Program 3: Clean Energy Improvements in Single-Family Homes

FIVE-YEAR FUNDING ALLOCATION: \$140,000,000

DESCRIPTION

PCEF will invest \$140 million over five years in more than 3,000 single-family homes to reduce GHG emissions, decrease energy usage and utilities bills, and improve homeowner stability while increasing comfort, health, and resiliency.

In Portland, there are roughly 42,000 homeowners with income below 80% of AMI which accounts for 29% of all homeowner households. Many of these homes are older, inefficient, and uncomfortable. This program will fund energy efficiency and renewable energy improvements in low-income, owner-occupied, single-family homes and offer incentives for renters and moderate-income homeowners. Homes owned and occupied by low-income households will be eligible for deep home energy retrofits and the highest level of program investment. Eligible improvements for rentals and moderate-income owner-occupied units will be limited to high-impact measures and are funded at a lower level.

All improvements will focus on the highest carbon emission and energy use reduction potential and will include measures that also provide health, safety, and accessibility benefits. Homes will receive a test-in assessment that follows building science principles and generates estimated energy-saving projections, and test-out quality assurance verification.

Table 5. Single-family energy investments.

Eligible households	Eligible activity	Number of homes five-year total estimated	PCEF investment per home*	Target reduction in energy use per home
Homeowners <80% AMI	Deep energy retrofits	1,500	Up to \$50K	30%
Renters <80% AMI	Limited high-impact energy efficiency measures	500	Up to \$15K	15%
Homeowners 81%-120% AMI	Limited high-impact energy efficiency measures	600	Up to \$30K	20%
Homeowners 121%-150% AMI	Limited high-impact energy efficiency measures	450	Up to \$15K (50% match required)	20%
Small in-home childcare centers and congregate housing	Limited high-impact energy efficiency measures	50	Up to \$15K (50% match required)	20%

*Up to 30% of construction budget for each single-family home can be used for health, safety, accessibility, or enabling repairs. The remaining 70% must be used for energy improvements.

If match funding is available and the total project cost (PCEF funds + match funds) meets the requirement of at least 70% of total construction budget going into energy improvements, then up to 50% of PCEF funding can be applied to health, safety, accessibility, or enabling repairs.

**Included in single family homes are duplexes, triplexes, quads, and condominiums. Participant eligibility will align throughout the single-family program, but PCEF investment levels will vary between building types.

OUTCOMES

- Deep energy retrofits in owner-occupied, low-income homes.
- Limited high-impact retrofits in owner-occupied, moderate-income homes.
- Limited high-impact retrofits in renter-occupied, low-income homes.
- Homes will have improved comfort, safety, and climate resiliency.
- Improved housing stability for low-income homeowners.

GOAL MEASURES

- Clean energy improvements in more than 3,000 single-family households and 50 in-home childcare or congregate living resulting in 120,000 - 150,000 MT lifetime CO₂e emission reduced.⁷
- 30% average energy usage reduction in low-income, owner-occupied homes.
- 20% average energy usage reduction in moderate-income, owner-occupied homes.
- 15% average energy usage reduction in low-income, renter-occupied homes.

INVESTMENT STRATEGY

Over five years, PCEF will invest \$140 million in single-family home energy retrofits and \$3.5 million in workforce and contractor development. The program will invest in:

- 1,500 deep energy retrofits in owner-occupied, low-income homes.
- 600 limited high-impact energy upgrades for homeowners with incomes of 81-120% AMI.
- 450 limited high-impact energy upgrades for homeowners with incomes of 121-150% AMI with a 50% match requirement and low-cost financing options.
- 50 limited high-impact energy upgrades for homes serving as care facilities or congregate housing with a 50% match requirement and low-cost financing options.
- 500 limited high-impact energy upgrades for single-family home renters with incomes less than 80% AMI. To reduce the risk of displacement, allowable measures will have high energy savings value and low rental market value.

⁷ Energy savings are estimated using a mix of deemed measure-level savings and whole building evaluations from Energy Trust of Oregon, as well as modelled savings from National Renewable Energy Laboratory (NREL)'s ResStock tool.

ELIGIBILITY FOR ADMINISTRATION

Who may apply:

- Nonprofit organizations.
- For-profit organizations.
- Government organizations.

Eligible applicants may apply to fulfill one or more program roles including:

- Central administrator, marketing, and data management.
- Contractor/project implementer - must commit to a minimum of 50 deep home energy retrofits or 150 limited measure installations per year for at least two years.
- Outreach and culturally specific program navigation and engagement.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

In addition to program-wide workforce and contractor goals and requirements, this strategic program has additional program-specific investment described below.

Allocation: \$3,500,000

WORKFORCE AND CONTRACTOR DEVELOPMENT INVESTMENT GOALS

- 350-400 workers trained on green building and equipment installation.
- 5,000 hours of building science technical mentorship for contractors.
- Equipment provided for 15-25 contractors entering or expanding in building clean energy work.
- Retention grants for up to 80 new workers and 50 contractors.

Strategic Program 4: Clean Energy in Small Commercial Buildings

FIVE-YEAR FUNDING ALLOCATION: \$25,000,000

DESCRIPTION

Small businesses often operate on tight margins and may be more vulnerable to the impacts of climate change. For example, small businesses often have limited cash reserves and may suffer significant impact from having to shut down during a major climate-related weather event. Many small businesses are also still emerging from financial hardships caused by the pandemic. The small commercial spaces in which many small businesses operate have been historically difficult for climate programs to serve.

This program is intended to reduce energy usage and cost, create health benefits, and increase resilience for small businesses in Portland, with a focus on BIPOC (Black, Indigenous, and People of Color)-owned businesses. Small businesses will be eligible for appliance and equipment efficiency upgrades. Additionally, small commercial buildings (up to 40,000 square feet with a priority for those less than 20,000 square feet) will be eligible for clean energy building improvements if they are occupied or will be occupied by a qualifying small business. In addition to building clean energy improvements, electric vehicle charging stations may be included with a comprehensive energy efficiency scope. These investments will result in energy and carbon emissions savings and improved indoor air quality for small businesses and small business spaces.

Program design is informed by two main sector challenges:

- *Split-incentive*. Tenant businesses who pay the utility bills in small commercial buildings are the direct beneficiaries of efficiency and renewable energy upgrades, but the building owner makes decisions about and funds building upgrades.
- *Displacement risk*. Major improvements to small business spaces can have the unintended consequence of increasing rent to a level which may not be affordable for the current tenants.

To mitigate these barriers, the program will take a two-pronged approach: (1) investing in turn-key clean energy building upgrades which lower utility bills and improve comfort and air quality for occupants, and (2) investing in clean-energy upgrades for business-owned appliances and equipment which lower energy use and contribute to business resiliency.

OUTCOMES

- Business owners receive high efficiency appliances/equipment.
- Small commercial buildings receive clean energy improvements.
- Property owners/managers receive building system management training to maximize efficiency outcomes.
- Improve health for workers and patrons and lower utility cost for business owners.
- Increase small business stability and resilience.

GOAL MEASURES

- Energy upgrades in 65 small commercial buildings and high efficiency appliance replacements for 75 small businesses will generate an estimated 12,000 -14,000 MT lifetime CO₂e emissions reductions.⁸
- 20% energy savings for small business owners.
- 50% of businesses receiving energy upgrades are owned by people who belong to historically under-resourced groups.

INVESTMENT STRATEGY

Over five years, PCEF will invest \$25 million in appliance replacements for 75 businesses with a maximum PCEF investment of \$100,000 per business, and clean energy upgrades in 65 small commercial buildings with a maximum PCEF investment of \$200,000 per building. This program will prioritize investment in businesses in high energy use sectors with high energy savings opportunities such as food service, food sales, small manufacturing, lodging, and laundromats. Outreach will also be designed to reach businesses providing services to vulnerable populations such as children, seniors, and people living with disabilities.

Building owners will be required to provide 25% match for building upgrades. Property owner match can be from any source including utility, state, and federal programs, and PCEF-supported financing or other finance products. Energy assessments to determine the highest efficiency solution will be required for both building improvements and high efficiency appliances.

ELIGIBILITY FOR ADMINISTRATION

This strategic program may be administered by another government entity based on the availability of complementary services that enhance program delivery and support mission alignment with the purpose of this strategic program.

Who may apply:

- Nonprofit organizations.
- For-profit organizations
- Government organizations.

⁸ Electricity savings from whole building retrofits are estimated based on similar small commercial programs in the region such as Puget Sound Energy's Small Business Direct Install program and PacifiCorp's PacifiCorp Small Business Enhanced Incentive program. Natural gas savings from retrofits and dual fuel savings from appliance upgrades are estimated by assuming a portion of program participants will electrify or upgrade space heating, cooking, and refrigeration and incorporating data from the Commercial Buildings Energy Consumption Survey (CBECS) and a Department of Energy's Energy Savings Potential and RD&D Opportunities for Commercial Building Appliances (2015 Update).

Applicants must provide the following program needs:

- Marketing and targeted outreach.
- Project development and management.
- Energy assessment and analysis.
- Vendor relationship development.
- Collaboration with other funding and financing resources.
- Delivery of low burden, turnkey projects to businesses and building owners.



“Small businesses often operate on tight margins and may be more vulnerable to the impacts of climate change. Many small businesses are also still emerging from financial hardships caused by the pandemic.”

Strategic Program 5: Building Upgrades for Community Severe Weather Response

FIVE-YEAR FUNDING ALLOCATION: \$30,000,000

DESCRIPTION

This program will fund building energy upgrades for sites owned and/or managed by eligible government entities and nonprofit organizations that make a long-term commitment to provide critical services during severe weather-related events. These may include high heat events, snowstorms, and wildfire smoke events. Types of upgrades may include solar installations; battery backup; and high-efficiency heating, cooling, and air filtration systems. Grant funding will primarily pay for physical improvements to buildings. Additional eligible expenses will include program planning; system design; coordination and outreach activities; and life, health, and safety improvements, including seismic upgrades and improvements to increase disability accessibility. By investing in these building energy upgrades, Portland community members will have improved access to resilient spaces for severe weather-related events.

OUTCOMES

- Expand total number of buildings in Portland that provide critical services to the public during severe weather-related events.
- Improve building efficiency, access to heating/cooling, continuity of service during power outages, and air quality.
- Improve geographic distribution of locations providing critical services during severe weather-related events.
- Increase community and culturally specific accessibility for people seeking critical services during severe weather-related events.
- Increase number of buildings with disability accessibility that provide critical services during severe weather-related events.

GOAL MEASURES

- Increase percent of Portland community members with neighborhood access to shelter and services during severe weather-related events.
- Net zero CO₂e emissions.

The primary goal of this program to increase resilience for facilities used in climate emergencies. In many instances, this will involve upgrades that may increase the overall energy consumption of the building including improved ventilation and cooling, as well as other measures that have limited GHG reductions like battery systems. Setting a goal for net zero carbon emissions will enable maximum investment in resilience measures. In all instances, these will be paired with energy efficiency and/or

renewable energy measures to ensure, at a minimum, that the program does not result in increased GHG emissions.

INVESTMENT STRATEGY

Over five years, this program will invest \$30 million into government and nonprofit building upgrades. This grant opportunity will primarily be managed by PCEF staff. At least \$200,000 of this funding will be dedicated to technical assistance for applicants. Technical assistance will primarily consist of feasibility studies that will inform building selection and improvements. Up to 50% of the construction budget can be used for eligible non-energy life, health, safety, and accessibility upgrades (e.g., wheelchair ramps, seismic stability improvements). While most of the funding will be invested in physical improvements, a small portion of funds will be allocated for climate resilience-related planning and coordination expenses.

ELIGIBLE SITES

Sites under control of the following entities may apply for funding:

- Nonprofit organizations.
- Government organizations.

Must provide the following program needs:

- Own the site or hold an eligible long-term lease agreement.
- Have publicly accessible spaces within the building that could be used during climate-related disaster events.
- Be willing to commit to providing certain critical services required by the City during climate-related disaster events.

Additional priority will be given to:

- Organizations with a demonstrated history of serving people with disabilities.
- Organizations that can offer leverage of staff resources for programming activities during severe weather-related events.
- Buildings that are suitable for solar photovoltaic upgrades.
- Locations that provide overnight sheltering.
- Locations that improve the geographic distribution of buildings that provide critical services during severe weather-related events.



Transportation decarbonization

Transportation accounts for 42% of Multnomah County's carbon emissions making community-driven efforts to transition to an equitable, clean transportation system an essential part of the strategy to meet the City's climate goals.

To guide the new transportation decarbonization funding category, a PCEF-managed transportation workgroup will advise on Community Grants and strategic programs for 24 months. The workgroup will use PCEF's equity + climate framework to provide input on strategic program RFPs, community engagement, and may assist in evaluation of transportation-related Community Grant proposals. The workgroup is advisory to Bureau of Planning and Sustainability (BPS) and Portland Bureau of Transportation (PBOT) program decisionmakers and is intended to foster more equitable outcomes as the program is being delivered. The workgroup will be supported by a strategy team composed of staff from BPS/PCEF, PBOT, and at least one community-based organization representative to help facilitate discussions.

In addition to PCEF priority populations, the transportation decarbonization funding category also prioritizes youth and disability inclusion to promote equitable access to transportation benefits, particularly for those with mobility challenges, and leverages the potential for long-lasting carbon reductions through education and behavior change among youth.

Community Grants – Transportation Decarbonization

TOTAL FIVE-YEAR FUNDING ALLOCATION: \$35,000,000

Transportation decarbonization is a new funding category for PCEF. There will be an emphasis on planning grants in transportation decarbonization Community Grants during the first two years to support future project development. Planning grants will help nonprofit organizations identify community transportation needs and solutions and prepare them to implement sustainable projects.

Examples of potential transportation decarbonization projects under Community Grants include:

- Programming, including education and outreach, that expands access to and promotes sustainable transportation modes. These include walking, biking, public transportation, carpooling, and electric vehicle usage.
- Electric vehicle car share program at an affordable housing site or bike-sharing program at a community center.
- Switching an organization's high-mileage, shared vehicles to electric vehicles (e.g., vans for school programs serving low-income youth or community transportation services for priority populations).
- Charging infrastructure that is equitable, convenient, reliable, affordable, safe, and accessible.

- Community-centered transportation planning processes that focus on the needs of priority populations.
- Other transportation decarbonization projects that reduce GHG emissions, advance racial and social justice, and do not fall within one of the strategic programs defined below.

Grant proposals may allocate up to 40% of their budget toward eligible life, health, safety infrastructure, and accessibility upgrades (e.g., traffic calming planters, walking paths) necessary for the project. For any projects impacting the public right-of-way, consultation with PBOT staff will be required prior to grant submittal to ensure feasibility and compatibility with plans, safety standards, and other factors related to the public right-of-way.

GOAL MEASURES

- 25,000 MT lifetime CO₂e emissions reduced.⁹

Table 6. Strategic programs – transportation decarbonization.

Strategic program name	Five-year funding allocation
SP 6: Comprehensive E-Bike Access and Support	\$20,000,000
SP 7: Equitable Clean Transportation Access	\$25,000,000

Strategic Program 6: Comprehensive E-Bike Access and Support

FIVE-YEAR FUNDING ALLOCATION: \$20,000,000

DESCRIPTION

Electric bicycles or “e-bikes” remove significant barriers to cycling by providing electric motor assistance to the rider. They can provide enhanced transportation options for people to commute to work, run errands, or engage in delivery services. E-bikes provide an efficient way to get around Portland, are not subject to vehicle congestion, do not require much physical exertion, offer trip flexibility, and offer dramatic cost savings with similar or faster times than driving or other modes. Use of e-bikes as an alternative to driving vehicles reduces transportation related carbon emissions and improves air quality. Women and BIPOC community members have stated through surveys that they feel less vulnerable on e-bikes than on pedal-only bicycles. There are different styles and models of e-bikes on the market, including cargo and adaptive mobility versions for people with disabilities. Lessons from other

⁹ Emissions savings estimated based on the expected number of electric vehicles replacing gas-powered Class 2 and 3 commercial vehicles and light-duty passenger vehicles used for commercial purposes. Fuel efficiency and annual vehicle miles travelled data were sourced from the Alternative Fuels Data Center (AFDC) and International Council on Clean Transportation (ICCT). While planning projects are not associated with direct CO₂ savings, other implementation projects will generate additional CO₂ savings, but insufficient project details are available to generate useful estimates at this time. GHG reductions will be managed across the portfolio of Community Grants to meet the goal.

municipalities around the country that have successfully launched e-bike rebate programs have been incorporated into the design of this program.

The high initial cost of e-bikes (typically starting at \$1,500) puts them out of reach for many low-income households. Community education and incentives are needed to provide equitable access to e-bikes, as well as access to safety equipment, lighting, weatherproof gear, charging infrastructure, secure storage areas, and locks.

OUTCOMES

- Significantly higher utilization of e-bikes by PCEF priority populations.
- Improved access and awareness about e-bike mobility options.
- Reduced GHG emissions from single-occupant vehicle use.
- Increased mental and physical well-being due to greater outdoor physical activity.
- Increased workforce opportunities in the sales and service of e-bikes at bike retailers throughout Portland.

GOAL MEASURES

- An additional 6,000 e-bikes and e-cargo bikes in use over the five-year period by PCEF priority population members generating an estimated 6,000 – 17,000 MT lifetime CO₂e emissions reduction.¹⁰

INVESTMENT STRATEGY

Income-qualified households will receive rebates for new e-bike and cargo e-bike purchases to be redeemed at local bike retailers. Participating bike retailers will need be physically located within Portland and provide both sales and repair services to be eligible to accept rebates.

Cargo e-bikes and adaptive electric bikes will receive a higher incentive. People receiving rebates will also be able to use a fixed amount of funds for bike safety equipment, locks, and gear.

The exact rebate amounts will be determined through market research, evaluation of needs, and interaction with other potential programs. There are active efforts at the Oregon state legislature and federal government to create rebate or tax credit mechanisms, though the future of those efforts is currently not known. Estimates for the purposes of this CIP do not account for presence of other incentive programs.

¹⁰ Emissions savings based on Portland State University study on e-bikes "The E-Bike Potential: Estimating the Effect of E-Bikes on Person Miles Travelled and Greenhouse Gas Emissions". This study produced low, mid and high range estimates for CO₂ reduction per e-bike user. PCEF goal range for the program are based on the mid and high range estimates.

The rebate program will be implemented in parallel with education and outreach by community-based organizations to PCEF priority populations about the e-bike opportunity, including information about safe riding, route-finding, charging, and storage. Surveys and data will be collected about e-bike use, storage, and charging. An early program evaluation will include recommendations for a pilot program for allocating funds for safe e-bike storage and charging needs for existing multifamily properties.

Retail bike shops in Portland will participate in the e-bike rebate program through an application process that requires reporting of the redemption of rebates, tracking of e-bike models and volume sold, and commitments to provide maintenance and repair services for e-bikes sold.

ELIGIBILITY FOR ADMINISTRATION

Who may apply:

- Nonprofit organizations.
- For-profit organizations.
- Government organizations.

Eligible applicants may apply to fulfill one or more of the following program roles:

- Program administrator. Responsibilities include:
 - Program development and contract management.
 - Marketing.
 - Income qualification and rebate issuance to qualified Portlanders.
 - Rebate tracking and analysis.
 - Vendor relationship management.
- Culturally responsive outreach and education.
- Workforce development.

Further clarity of roles and eligibility for this program will be informed by the transportation decarbonization workgroup.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

In addition to program-wide workforce and contractor goals and requirements, this strategic program has additional program-specific investment described below.

Allocation: \$600,000

WORKFORCE AND CONTRACTOR DEVELOPMENT INVESTMENT GOALS

- Training and retention grants for up to 50 new e-bike mechanics.

“Women and BIPOC community members have stated through surveys that they feel less vulnerable on e-bikes.”



Strategic Program 7: Equitable Clean Transportation Access

FIVE-YEAR FUNDING ALLOCATION: \$25,000,000

DESCRIPTION

Accessible and affordable transportation is vital to fulfilling basic needs such as medical care, food, shelter, job opportunities, and social activities. Transportation costs are often a significant expense, especially for low-income households residing in areas with limited access to transportation options. To address this issue transportation incentive programs, like PBOT's Transportation Wallet Access for All (AFA) program, have been implemented across the nation. These programs reduce transportation costs, promote sustainable modes of transportation and decrease carbon emissions.

This program expands PBOT's Transportation Wallet AFA program by offering qualifying participants a package of free transportation options such as public transit passes, bike share (BIKETOWN), e-scooter ride credit, and ride-hailing (Uber/Lyft) or taxi credit. The program allows participants to choose transportation options that meet their individual needs with an emphasis on low-carbon transportation modes. Ride-hailing and taxi services are included to meet user needs, serving as a valuable mode for one-off trips due to unexpected or essential travel needs and/or the lack of other transportation options. A PBOT evaluation shows that of the 52% of participants opting to using ride-hail services, most were taking only between 1-5 of these types of trips while using public transportation as their daily mode of travel.

To increase accessibility of this program for individuals experiencing mobility challenges, the program includes options for using transportation credits for TriMet Lift (paratransit program), adaptive BIKETOWN rides, and on-demand rides for people using mobility devices through taxi, Uber, and Lyft. Information on how to access adaptive BIKETOWN and on-demand rides through the [PDX WAV](#) program will be made available.

This program builds on the success of past iterations, including two phases of the Transportation Wallet for Affordable Housing pilot program managed by PBOT in partnership with affordable housing sites. Participants of the pilot had increased usage of sustainable modes of transportation, including public transit and biking, an improved sense of safety through the accessibility of increased travel modes, and reduced travel-related stress. Similar programs operating in Oakland and south Los Angeles have shown comparable outcomes including a reduction of drive-alone trips.

OUTCOMES

- Reduction in fossil fuel based single-occupancy trips through increased usage of shared mobility services (bikeshare, electric scooters, etc.).
- Reduction in carbon emissions.

- Increased travel options and services to connect people to jobs, healthcare, education, and social opportunities.
- Increased resilience in climate-impacted neighborhoods.
- Reduced financial barriers to accessing jobs, food, and healthcare.

GOAL MEASURES

- 15,000 – 20,000 PCEF priority population community members with increased access to clean transportation options resulting in a 15,000 - 21,000 MT CO₂e reduced over 5-year program.¹¹
- Increased percentage of use of low or zero-carbon transportation options.

PROGRAM ADMINISTRATION

PBOT, the current program administrator, will continue to manage the Transportation Wallet AFA program as they have the infrastructure and expertise to expand and improve the program. Partnership with community-based nonprofit organizations with deep roots and a proven track record in the community is essential for effective enrollment and engagement of participants.



“An evaluation of the Transportation Wallet program showed that participants had increased usage of sustainable modes of transportation including public transit and biking, improved sense of safety through the accessibility of increased travel modes, and reduced travel-related stress.”



¹¹ Emissions savings estimated based on reduction in car usage from a similar program in Oakland (Universal Basic Mobility Pilot), average daily vehicle miles travelled from Oregon Metro reporting, and average fuel economy from the Alternative Fuels Data Center (AFDC).



Green infrastructure

Green infrastructure presents a unique opportunity for carbon sequestration (i.e., removing carbon from the atmosphere). To reach the City's 2050 climate goals, carbon sequestration is necessary. Green infrastructure also provides an array of climate co-benefits, including increased shade and cooling, improved air quality, stormwater mitigation, and wildlife habitat.

Community Grants – Green Infrastructure

FIVE-YEAR FUNDING ALLOCATION: \$7,200,000

\$5 million general allocation. Green infrastructure focused Community Grants are intended to capture investments in urban tree canopy expansion efforts, bioswales, depaving, and other projects that use vegetation, soils, and other elements to sequester carbon emissions. These grants are intended to support projects that do not fall within other programs defined below.

\$2.2 million 82nd Avenue allocation. As part of SP 11: 82nd Avenue climate infrastructure and community resilience grants, an additional \$2.2 million is allocated for Community Grants for green infrastructure projects located within 0.25 mile west and 0.5 mile east of the 82nd Avenue.

GOAL MEASURES

- 9,000 MT lifetime CO₂e emissions sequestered.¹²

Table 7. Strategic programs – green infrastructure.

Strategic program name	Five-year funding allocation
Tree Canopy Maintenance Reserve	\$5,000,000
SP 8: Equitable Tree Canopy	\$40,000,000

¹² Projects modelled include rain gardens and bioswales, pervious pavement, green roofs, and urban trees. Sequestered and avoided CO₂ values are based on "Economic Benefit Values for Green Infrastructure" (FEMA), "Cost Benefit Evaluation of Ecoroofs 2008" (City of Portland's Bureau of Environmental Services), and "Green Infrastructure Benefits Valuation Tool" (Earth Economics). Establishment care is covered by the program for the first 5 years. GHG reductions will be managed across the portfolio of Community Grants to meet the goal.

Tree Canopy Maintenance Reserve

FIVE-YEAR FUNDING ALLOCATION: \$5,000,000

DESCRIPTION

This program area will allow low-income property owners to access funds for the maintenance of existing established street trees. The fund will help reduce cost and burden associated with tree care for lower-income households and ensure that existing trees throughout the city receive professional health and safety assessment, pruning, and if needed, removal and replanting.

The program will be administered by Portland Parks and Recreation's Urban Forestry division (PP&R), with input on program design from the stakeholder workgroup that will be convened for the Equitable Tree Canopy strategic program.

OUTCOMES

- Enhanced carbon sequestration in urban canopy.
- Maintain full ecological benefit of established trees.
- Reduction in barriers to planting trees in under-resourced areas.
- Healthier and more resilient urban canopy that can better withstand the impacts of climate change.

GOAL MEASURES

- 7,000 to 17,000 low-income households receiving critical tree pruning services resulting in 10,000 - 30,000 MT lifetime CO₂e emissions sequestered.^{13,14}
- \$1.2 - \$3 million in deferred tree removal costs.

INVESTMENT STRATEGY

Income-qualified households anywhere in Portland will be eligible to request evaluation and pruning of street trees to maintain a healthy urban canopy, based on the following:

- 100% pruning costs covered for owner-occupied homes with income up to 100% AMI, prioritizing lower income households.

¹³ The range of number of households served is broad to acknowledge wide variations in the cost of different services that will be available through the tree maintenance fund.

¹⁴ Additional carbon sequestration estimated for increase in tree lifespan due to proper maintenance. Lifespan increases range from 15%-100% for street trees based on accepted research and internal subject matter expertise. Note that this five-year iteration of the tree maintenance reserve will only fund the first instance of maintenance for selected street trees, but the goals assume this maintenance will continue with future funds from the tree maintenance reserve. Estimated cost of tree maintenance may be updated pending future conversations with the Urban Forestry Division.

- The program will prioritize funding availability for households with <80% AMI.

PROGRAM ADMINISTRATION AND ADDITIONAL ROLES

PP&R will administer this program. Critical implementation roles that will be subcontracted include arboriculture services by nonprofit and/or for-profit entities.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

In addition to program-wide workforce and contractor goals and requirements, this strategic program has additional program-specific investment described below.

Allocation: \$250,000

WORKFORCE AND CONTRACTOR DEVELOPMENT INVESTMENT GOALS

- 300 – 400 hours of arboriculture-related technical mentorship for contractors.
- Hiring and retention grants for up to 15 new arboriculturists.



“In order to reach the City’s 2050 climate goals, carbon sequestration is essential.”



Strategic Program 8: Equitable Tree Canopy

FIVE-YEAR FUNDING ALLOCATION: \$40,000,000

DESCRIPTION

The equitable tree canopy, one of [two fast tracked programs](#) in the CIP, will work in Portland's most heat-vulnerable neighborhoods to equitably plant and establish at least 15,000 – 25,000 trees on public and private property. The program will establish trees over a five-year post planting period, track health and wellness of a meaningful sample of planted trees, build lasting relationships with community-based organizations, and offer tree care resources and communication to tree recipients. As part of this effort, the program will also support the development of a diverse, well-trained workforce and contracting community for tree planting and maintenance.

OUTCOMES

- Improved air quality, community health, and well-being.
- Reduced urban heat island effect in low canopy areas.
- Increased carbon sequestration.
- Improved urban stormwater management.
- Greater community cohesion.

GOAL MEASURES

- 15,000 – 25,000 trees planted sequestering 18,000 - 30,000 MT lifetime CO₂e emissions.¹⁵

INVESTMENT STRATEGY

Over the course of the five-year CIP, the equitable tree canopy program will plant up to 25,000 trees on public property (i.e., street trees) and private property (i.e., yard trees) in shade-deficient areas. The program will use both opt-in and opt-out delivery models, with a strong focus on the opt-in approach. While some trees will be distributed through community tree giveaways, most will receive professional tree planting and establishment care. This care includes at least 100 tree visits over five years, involving watering, mulching, pruning, and other tree-establishment related care.

¹⁵ Species distribution based on historical planting by Urban Forestry. Carbon sequestration and avoided carbon calculated with iTree Planting for an assumed mix of yard and street trees.

PROGRAM ADMINISTRATION

PP&R will oversee the program, leveraging their experience and well-aligned tree planting programs in public and private spaces. Effective implementation will require close collaboration with community-based nonprofit organizations that have deep roots and a proven track record in the community.

A PCEF-managed workgroup comprised of PP&R staff, PCEF staff, Bureau of Environmental Services staff, an Urban Forestry Commission member, a PCEF Committee member, academic faculty, implementation partners, and community stakeholders will be convened to provide regular advice on program implementation.

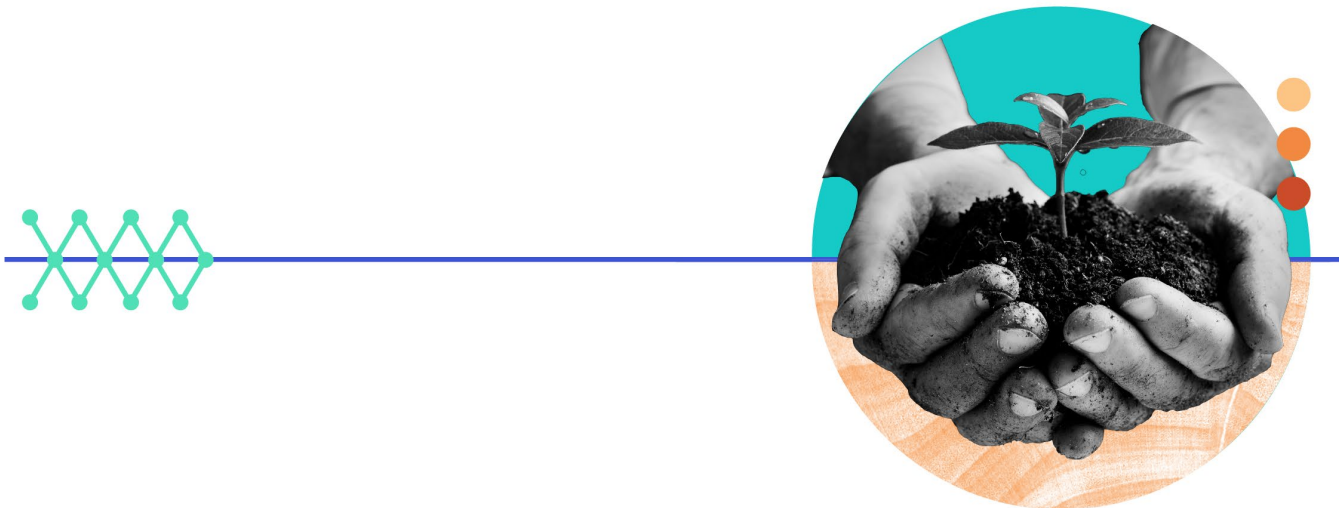
ELIGIBILITY FOR ADMINISTRATION

- PP&R.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

The Equitable Tree Canopy workgroup will advise on how optimally to distribute workforce and contractor development resources to support a strong, diverse workforce and contracting pool.

Allocation: \$2,000,000





Regenerative agriculture

Regenerative agriculture supports the City's carbon sequestration efforts through agricultural practices that increase the capacity of soils to store carbon by rebuilding soil organic matter and restoring degraded soil biodiversity. Regenerative agriculture provides numerous co-benefits including providing greater locally produced, lower carbon-intensive foods and traditionally important fibers and materials, improved accessibility to healthier foods and cultural practices, and greater support of community-based food systems. In order to better understand the urban agricultural ecosystem and potential within the city of Portland, PCEF will support a collaborative research, planning, and community engagement process in the first two years of the CIP.

Community Grants - Regenerative Agriculture

FIVE-YEAR FUNDING ALLOCATION: \$14,000,000

DESCRIPTION

Regenerative agriculture focused Community Grants will support community-led projects that expand opportunities for cultivation of local food, fibers, and materials on urban farms, backyard gardens, and community gardens; and increase the use of public and private land for growing food and materials. These grants are intended to support projects that do not fall within the strategic program defined below.

Table 8. Strategic programs – regenerative agriculture.

Strategic program name	Five-year funding allocation
SP 9: Increasing Access to Urban Regenerative Agriculture Opportunities - Planning and Land Acquisition	\$6,000,000

Strategic Program 9: Increasing Access to Urban Regenerative Agriculture Opportunities - Planning and Land Acquisition

FIVE-YEAR FUNDING ALLOCATION: \$6,000,000

DESCRIPTION

This program area includes an investment strategy to increase community-based organizations' outcomes and capacity in regenerative agriculture, land stewardship, and land ownership. It will support the acquisition, site development, and early management of two to three regenerative agriculture sites of at least 20,000 square feet each, sequestering carbon, increasing the city's open space and agricultural land base, and fostering greater community-based materials and food production. These investments may utilize a community land trust, cooperative, or other alternative ownership models to provide community-based organizations equitable long-term access to land.

OUTCOMES

- Healthier soils with greater carbon sequestration capacity.
- More locally produced, lower-carbon intensity foods and culturally important fibers, medicines, and materials
- Increased accessibility to healthy foods and cultural practices for PCEF priority populations.
- Increased opportunities for building relationships with the land for PCEF priority populations.

GOAL MEASURES

- At least 40,000 square feet of land dedicated long-term for regenerative urban farming.

INVESTMENT STRATEGY

Through a competitive solicitation, the program will select proposals from organizations seeking to further their regenerative agriculture efforts. Program participants will be evaluated for organizational capacity in regenerative agriculture practices, land stewardship, and land ownership. Organizations demonstrating capacity will be supported in acquiring, developing, conducting site preparation, and managing urban farming plots of at least 20,000 sq. ft. each.

ELIGIBILITY FOR PARTICIPATION

Who may apply:

- Nonprofit organizations.

Additional priority given to:

- Organizations that have demonstrated experience promoting and advancing regenerative agriculture in PCEF priority populations.



Organizational capacity building

Organizational capacity building is a new funding category intended to support nonprofit organizations focused on climate action to obtain resources (e.g., trainings, technical assistance, consultation, staff support, etc.) to increase climate program delivery. By improving their operational, programmatic, and financial capacities, nonprofit organizations can enhance their ability to manage funding, track data, build a skilled workforce, and ultimately make a greater impact on addressing climate change. Organizational capacity building resources are offered through a few different avenues: the Mini Grant program, the Community-Based Organization (CBO) Capacity Building program, and through resources and services that will be available for PCEF grantees of the Community Grants program with identified capacity needs.

COMMUNITY GRANTS - MINI GRANT PROGRAM

FIVE-YEAR FUNDING ALLOCATION: \$1,300,000

DESCRIPTION

Launched in August 2021, the PCEF mini grant program aims to reduce barriers for organizations engaging in work that addresses climate change while advancing racial and social justice. The program offers a quarterly grant opportunity that is responsive to small, time-sensitive funding needs through a simple application.

OUTCOMES

- Increase number of nonprofits doing work that addresses climate change in the city of Portland.
- Provide a low-barrier funding opportunity that prioritizes small organizations doing climate work and serving PCEF priority populations.
- Support small and emerging community-based organizations to access other PCEF funding opportunities.

GOAL MEASURES

- 200 nonprofit organizations have accessed time-sensitive funding for small projects and activities that address climate change while advancing racial and social justice.

INVESTMENT STRATEGY

- *\$1 million general mini-grant allocation.* Over five years, the program will distribute \$1,000,000 in grant funding. The mini grant program has a total annual budget of \$200,000. The grant

opportunity is run quarterly with \$50,000 in grant funds available each quarter. Applicants can apply for one grant of up to \$5,000 per quarter.

- *\$300,000 82nd Avenue allocation.* As part of SP 11: 82nd Avenue climate infrastructure and community resilience grant program, an additional \$300,000 will be allocated for mini grant projects located within 0.25 mile west and 0.5 mile east of the 82nd Avenue.

ELIGIBILITY FOR MINI GRANT FUNDING

Who may apply:

- Nonprofit organizations.
- Nonprofit organization fiscal sponsors.

Additional priority given to:

- Small organizations that are doing climate work and serving PCEF’s priority populations.



“The PCEF mini grant program aims to reduce barriers for organizations engaging in work that addresses climate change while advancing racial and social justice.”

Table 9. Strategic programs – organizational capacity building.

Strategic program name	Five-year funding allocation
SP 10: Community-Based Organization (CBO) Capacity Building Program	\$10,000,000

Strategic Program 10: Community-Based Organization (CBO) Capacity Building Program

FIVE-YEAR FUNDING ALLOCATION: \$10,000,000

DESCRIPTION

This program will offer a multi-year cohort program for CBOs that includes training, technical assistance, consultation, operational funding, staff support, and other resources. The program seeks to enhance organizations' internal operational effectiveness, leading to improved outcomes in their climate-action projects and programs. The CBO capacity building program will equip organizations with resources and support to help them fulfill their mission and enabling us to achieve ours.

Organizations must demonstrate meaningful connection to addressing climate change, have a demonstrated history of advancing racial and social justice in its work and programming, and complete a capacity-needs assessment to ensure alignment with the types of support and services offered through the program.

A cohort will be selected whose composition reflects a diversity of organizations and capacity needs, has a strong connection between current work and climate-related activities and goals, and where PCEF funding and services will have the greatest impact on an organization's long-term capacity.

OUTCOMES

- Increase the number of effective nonprofit organizations advancing climate justice in Portland.
- Improve nonprofit cohort members' ability to address climate change.
- Improve nonprofit cohort members' service delivery for the communities they serve.

GOAL MEASURES

- Increase in organizational capacity – measured through an assessment that evaluates capacity changes of participating nonprofits working to address climate change while advancing racial and social justice.

INVESTMENT STRATEGY

Over five years, a total of \$7.5 million will be awarded to nonprofits participating in the CBO capacity building program. Each cohort will last three years, with a one-year overlap in cohorts. Each cohort will include 8-10 organizations, for a total of 16-20 organizations over five years. A total of \$2,500,000 will be awarded to contractors in direct support of program implementation activities.

ELIGIBILITY FOR PARTICIPATION

Who may apply:

- Nonprofit organizations focused on climate action.
- Nonprofit organization fiscal sponsors who are supporting community groups focused on climate action.

Additional priority given to:

- Organizations whose capacity needs align with PCEF's program offerings.



“The community-based organization capacity building program will equip organizations with resources and support to help them fulfill their mission and enabling us to achieve ours.”



COMMUNITY GRANTS – TECHNICAL ASSISTANCE AND CAPACITY BUILDING

FIVE-YEAR FUNDING ALLOCATION: UP TO \$5,000,000

PCEF anticipates that some organizations selected to receive grant funding through Community Grant opportunities will have technical assistance and organizational capacity needs. Up to \$1 million per year for the five-year CIP period will be allocated to provide technical assistance and capacity building support to grantee organizations in need. These funds are included in the total Community Grant fund allocation and do not constitute a stand-alone grant program. The purpose of these investments is to offer a wide range of expert support to organizations in successfully implementing their climate projects (e.g., capacity building support from a human resource professional to guide in hiring, accounting and bookkeeping consultation and training, organizational development consulting, etc.).





Multiple funding categories/other carbon emissions reducing projects

This category captures projects and programs that do not clearly fall under an existing funding area or spans multiple funding areas.

Community Grants – Other Carbon Reducing Projects

FIVE-YEAR FUNDING ALLOCATION: \$2,000,000

DESCRIPTION

Other carbon reducing/sequestering Community Grant projects include projects that do not fall under other PCEF code funding categories but provide meaningful and measurable carbon reduction or sequestration, prioritizing those that provide benefits to PCEF priority populations. An example may include projects that promote sustainable materials management that results in reduced lifecycle carbon emissions and increased recycled materials.

METRICS TRACKED

- Total GHG emissions reduced or sequestered.
- Percent or number of PCEF priority population members benefited.

Table 10. Strategic programs – multiple funding categories/other carbon emissions reducing projects.

Strategic program name	Five-year funding allocation
SP 11: 82nd Avenue Climate Infrastructure and Community Resilience Grants	\$5,000,000
SP 12: 82nd Avenue Street Tree Expansion	\$5,000,000
SP 13: Targeted Electric Vehicle Financing Tools	\$35,000,000
SP 14: Access To Fair and Flexible Capital	\$45,000,000
SP 15: Federal Climate and Equity Funding Opportunities	\$20,000,000
SP 16: Climate-Friendly Public Schools	\$50,000,000

Low-carbon, equitable 82nd Avenue corridor

The 82nd Avenue corridor strategic program is PCEF's first and only geographically focused investment, leveraging the opportunity presented by the recent jurisdictional transfer of the corridor to the City of Portland. This transfer, which was made possible by years of work by community leaders and elected officials, commits \$185 million to safety improvements to the corridor allowing PCEF to enhance ongoing efforts to create a low-carbon and equitable 82nd Avenue corridor.

This program will invest in two strategic programs to support community stabilization through a climate resilience and justice approach: (1) climate resilience initiative, which infuses additional resources to existing grant programs for nonprofits and businesses to support climate efforts, and (2) street tree expansion, which will create spaces for trees and plant trees on the corridor to mitigate the urban heat island effect. These two programs balance fulfilling a highly expressed community need for trees in the corridor, while also nurturing and empowering the leadership of community groups and businesses in climate action efforts. Business stabilization was also identified as a priority during community feedback.

The strategies were developed based on valuable insights from community roundtables, public comments, and planning documents. These documents include the 82nd Avenue Corridor Atlas (2023), the 82nd Avenue Study: Understanding Barriers to Development (2019), and the Jade District Visioning Plan (2014). These strategies complement PBOT investments for near-term critical fixes occurring by 2027 and leverage \$2.5 million from the American Rescue Plan Act, including \$640,000 of investments for small business and resident stabilization by Prosper Portland, PHB, and PBOT.

Strategic Program 11: 82nd Avenue Climate Infrastructure and Community Resilience Grant Program

FIVE-YEAR FUNDING ALLOCATION: \$5,000,000

DESCRIPTION AND INVESTMENT STRATEGY

This program supports and develops existing community and business leadership in the 82nd Avenue corridor to enhance the ability of current residents and business to deal with and alleviate the impacts of climate change. PCEF will allocate funding to grant programs that will reach target beneficiaries through outreach and marketing efforts. By linking community organizations and businesses with existing programs, they will be positioned to continue to utilize these resources and build stronger networks that will last well beyond this investment timeline.

Program objectives:

- Residents, nonprofits, and businesses will participate in climate-action efforts.
- Improve the overall climate resilience of existing residents and businesses.
- Increase community engagement and awareness of climate issues and solutions.

Funding will be allocated to existing programs.

- *\$2.5 million to two PCEF grant programs.* \$2.2 million will be allocated as additional funding for Community Grants for green infrastructure projects located within 0.25 mile west and 0.5 mile east of the 82nd Avenue corridor. \$300,000 will be set aside as additional funding for PCEF mini grants to fund small-scale projects that help build community resilience and address the impacts of climate change in historically underserved communities.
- *\$2.5 million to Prosper Portland.* \$2.5 million for grants and associated administrative costs as part of Prosper Portland’s business stabilization efforts on the 82nd Avenue corridor (\$2.2 million) and community event grants program (\$300,000). Business grants will fund physical improvement projects that mitigate the effects of climate change and accelerate the corridor’s transition to clean energy. Proposals may include planning, or implementing building energy efficiency upgrades; electric mobility infrastructure, or depaving for green infrastructure. Eligible project expenses may include coordination and outreach activities; life, health, and safety improvements; technical assistance; and improvements to increase accessibility for people with disabilities. Community event grant recipients will promote relevant PCEF programs to attendees.

Preference will be given to projects in neighborhoods with greater proportions of PCEF priority populations including areas around Roseway, Lents, and neighborhoods east of 82nd Avenue.

Outreach and marketing to individuals, nonprofit organizations, and businesses within the 82nd Avenue corridor will be made to promote the availability of this funding, as well as funding from other PCEF programs including:

- SP 2: Clean energy in unregulated multifamily housing;
- SP 3: Clean energy improvements in single-family homes; and
- SP 4: Clean energy in small commercial buildings.

Additional outreach and marketing efforts will be made to encourage individuals, nonprofit organizations, and businesses within the 82nd Avenue corridor to apply.

OUTCOMES

- Community events featuring climate resiliency.
- Mini grant projects related to climate resiliency.
- Commercial buildings in corridor receive clean energy improvements.
- Business owners receive high efficiency appliances/equipment.
- Decreased paved areas and increased private property trees.
- Increased electric mobility charging options along 82nd Avenue corridor.
- Culturally relevant businesses are preserved, stabilized, and/or growing.

GOAL MEASURES

- 5,000 MT lifetime CO₂e emissions reduced and sequestered.¹⁶
- 12 businesses owned by people who are members of historically under-resourced groups are preserved, stabilized, and/or growing.

ELIGIBILITY FOR FUNDING

Who may apply:

- Nonprofit organizations may apply for PCEF Community Grant program, PCEF mini grant program, and Prosper Portland’s community event grant program focused on 82nd Avenue.
- For-profit organizations may apply for Prosper Portland’s business grants and community event grant program focused on 82nd Avenue.

Additional priority given to:

- Projects that use universal design principles to increase accessibility.
- Projects located in areas with a higher density of people who are members of historically under-resourced groups, specifically in Roseway, Lents, and neighborhoods east of 82nd Avenue.

¹⁶ Refer to footnotes for Community Grants – green infrastructure and SP 4: Clean energy in small commercial buildings as similar method was used.

Strategic Program 12: 82nd Avenue Street Tree Expansion

FIVE-YEAR FUNDING ALLOCATION: \$5,000,000

DESCRIPTION AND INVESTMENT STRATEGY

Increasing street trees along the 82nd Avenue corridor will address a key community priority and enhance investments in critical safety repairs made by PBOT.

Trees emerged as a top priority through robust community engagement efforts, including a 2022 survey that reached 1,900 residents and business owners along 82nd Avenue. Many communities of color and low-income households live in the corridor and have experienced some of the worst urban heat island effects from a lack of available space for trees in the right-of-way. This program will include investments that create space to plant street trees within the right-of-way along the corridor – one of the lowest areas for tree canopy coverage in the city.

Tree planting in the public right-of-way along 82nd Avenue and on intersecting side streets often requires widening curb-tight sidewalks to create space for planting trees in the furnishing zone. In some areas, trees can be planted in existing furnishing zones or in the curb zone (on-street parking) area next to the curb. This investment will arrive at a pivotal time for 82nd Avenue during PBOT's roadway paving, safety, and ADA accessibility compliance work, and will complement that work by investing in the sidewalk corridor and tree canopy.

PCEF's investment in street trees will fund approximately 2,500 linear feet (equivalent to thirteen 200-foot blocks) of sidewalk widening and tree planting along 82nd Avenue. In consultation with PP&R, the investment will prioritize large tree species to maximize shade potential.

The street tree expansion allocation creates a visible, lasting, positive impact on communities connected by 82nd Avenue and promotes improved tree survival by providing funding for five years of establishment care for newly planted street trees. It also complements other PCEF investments to increase canopy coverage along the 82nd Avenue corridor including SP 8: Equitable tree canopy and SP 11: Climate resilience initiative.

An equity lens will be applied to prioritize tree canopy investments to benefit PCEF priority populations. The program will work with community groups organized as part of the city planning effort for 82nd Avenue to develop site selection criteria and confirm community priorities regarding locations for tree planting. Engagements will occur through a series of forums including:

- The [82nd Avenue Community Coalition](#): a broad coalition of community members and representatives from CBOs with connections to issues of importance to 82nd Avenue communities. CBO members in the 82nd Avenue Community Coalition include APANO, Verde, Unite Oregon, and Oregon Walks.

- [PBOT’s Building a Better 82nd Avenue Community Advisory Group](#) (CAG): a group of 18 community members with diverse connections to 82nd Avenue.
- Summer/Fall 2023 Public Community Workshops jointly convened by PBOT, TriMet, and Metro for the purpose of collecting community feedback on options for future investment in safety, transit, and other community priorities for 82nd Avenue.
- Portland State University students from the Master of Urban and Regional Planning Workshop program developed a broader tree canopy investment strategy for the corridor as part of their capstone master’s project. The project included public involvement and analysis to determine priorities for sidewalk widening and tree planting along 82nd Avenue, including a comparison of alternative scenarios of investment in terms of cost per tree, equity benefits, and business impacts.

This investment will also improve health, safety, and livability for PCEF populations. According to a 2003 study, roadside greenery was found to facilitate relief from stress and fatigue, increasing people’s resilience to frustration and mitigate the aggravations of commuting. Also, studies show that street trees can help improve safety for both pedestrians and drivers by providing a clear demarcation of pedestrian zones and creating a visual wall that helps keep drivers on the roadway.

OUTCOMES

- Improved climate resilience infrastructure nearby and on 82nd Avenue.
- Carbon sequestration from street trees planted.
- Reduced urban heat island impact and improved air quality along 82nd Avenue corridor.

GOAL MEASURES

- 1,000 – 1,300 MT lifetime CO₂e emissions sequestered.¹⁷
- 2,500 linear feet of sidewalk with tree canopy.
- 75% of outreach, training and community engagement events focused on PCEF priority populations.

¹⁷ Species distribution based on historical planting by Urban Forestry. Carbon sequestration and avoided carbon calculated with iTree Planting for street trees.

ELIGIBILITY FOR ADMINISTRATION

The 82nd Avenue street tree expansion will be administered by PBOT in collaboration with Portland Parks and Recreation's Urban Forestry Division. PBOT has both the expertise and jurisdictional oversight in creating space for street trees in the public right-of-way, which will shade pedestrians, reduce the urban heat island effect, and sequester carbon. PBOT will be responsible for convening and consulting community stakeholders and reporting on program implementation.



“Trees emerged as a top priority through robust community engagement efforts, including a 2022 survey that reached 1,900 residents and business owners along 82nd Avenue.”



Strategic Program 13 – Targeted Electric Vehicle Financing Tools

FIVE-YEAR FUNDING ALLOCATION: \$35,000,000

DESCRIPTION

Electric vehicles (EVs) provide a significant opportunity to lower carbon emissions, reduce transportation costs, and reduce harmful pollution for PCEF priority populations, workers, and contractors in Portland. While there are incentives at the state and federal level for purchase of new and used EVs, there are still significant costs associated with purchase of EVs. Often, the most favorable interest rates and loan terms are out of reach for people and business owners of color and low-income communities.

Working with local lenders to reduce the total cost of purchasing EVs for people and businesses that drive high annual mileage for business, delivery, or commercial use can provide social and environmental benefit. Some financial institutions and credit unions have existing programs that provide a small interest rate reduction for EVs, and some nonprofits in the Portland area are offering small, matched savings accounts for vehicle purchases.

Deploying greater PCEF funds through reduced origination fees or interest rates, credit enhancement mechanisms, matched savings programs, conditional loan forgiveness, or lending pathways with flexible terms will provide access to EVs for PCEF priority populations. This funding area will target people and small businesses who have significant existing use of fossil-fueled vehicles in their current daily operations that could be replaced by EV usage. This includes ride-hailing drivers, food delivery services, wheelchair-accessible vans, non-emergency medical transport, and construction contractors working on PCEF projects. The financing mechanisms will be available for electric cars, trucks, vans, and commercial vehicles, as well as for e-cargo bikes or other vehicles that are not powered by internal combustion engines.

PCEF will offer funding to financial institutions and nonprofits to provide greater access to EVs at better terms than are commercially available.

Preference will be given to capital deployment and lending approaches that:

- Are developed in collaboration with community organizations and are responsive to culturally specific needs.
- Deploy increased financial education and business technical support for PCEF priority populations.

OUTCOMES

- Reduced fossil fuel use through greater adoption and usage of EVs in commercial applications.
- Lower transportation operating costs for priority populations.
- Increased access to safe, clean transportation.

GOAL MEASURES

- 1,221,000 MT lifetime CO2e emissions reduced.¹⁸
- 500 electric vehicles in operation for commercial use by businesses owned by people who are members of historically under-resourced groups.
- 50% loans to ride-hailing or delivery drivers will be made to members of historically under-resourced groups.

INVESTMENT STRATEGY

PCEF will solicit applications from financial institutions and nonprofit organizations to:

- Provide loans and matched savings tools for low- and moderate-income people, particularly those working in ride-hailing or delivery roles to purchase EVs and leverage federal and state incentives.
- Provide loans or financing tools for small businesses in Portland to purchase EVs for commercial use.

A market needs assessment, including expertise from eligible financial entities and community input, will be conducted to define additional priorities before the first RFP is released.

ELIGIBILITY FOR ADMINISTRATION

Who may apply:

- Nonprofit organizations with a track record of managing financial transactions.
- Entities registered as Community Development Financial Institutions (CDFIs).
- Cooperative credit unions.
- Banks with a physical branch presence in Portland.

All applicants must provide the following program needs:

- Manage consumer and/or business financial transactions.

Applicants will be encouraged to partner with community organizations on design, education, and implementation of lending programs.

¹⁸ Emissions savings estimated based on the expected number of electric vehicles replacing gas-powered Class 2 and 3 commercial vehicles. Fuel efficiency and annual vehicle miles travelled data were sourced from the Alternative Fuels Data Center (AFDC) and International Council on Clean Transportation (ICCT).

Strategic Program 14 - Access to Fair and Flexible Capital

FIVE-YEAR FUNDING ALLOCATION: \$45,000,000

DESCRIPTION

Deploying funds through loans, credit line mechanisms, matched savings, or community funding pathways with flexible terms will help grow the number of climate-focused projects and businesses in Portland that serve PCEF priority populations. A legacy of discriminatory and predatory practices by traditional banking institutions have created distrust in many low-income, communities of color, and immigrant communities. Innovative financing tools are needed to address these disparities in ways that are flexible, responsive to the community, accountable, and fair.

PCEF can create equitable opportunities for lending and capital access in ways that leverage additional financial resources and enable people and businesses to access upcoming federal and state incentives. These incentives include rebates and tax credits authorized by the IRA, Energy Trust of Oregon rebates, and heat pump programs being launched in 2023 by the Oregon Department of Energy. Some of the residential energy efficiency and renewable energy opportunities for homeowners with incomes of 121-150% of AMI in the PCEF CIP require a 50% project cost match that would be integrated with this funding area. Access to capital will allow households and small businesses in Portland to make improvements to buildings and scale up their business operations for climate-related work and employment.

Through partnership with CDFIs, cooperative credit unions, local banks and community organizations, and public agencies with financing experience, PCEF will offer funding for projects that result in measurable carbon emissions reductions. Approaches may include low- to zero-interest loans, flexible repayment terms, community lending circles, property-assessed clean energy financing tools (i.e., PropertyFit), loan loss reserve mechanisms, conditional loan forgiveness, high-ratio matched savings accounts, credit enhancement mechanisms, culturally specific finance tools, and community-based education and support about financing options. A market needs assessment will be conducted prior to program launch to define the highest priority approaches and funding mechanisms for different sectors.

Preference will be given to capital deployment approaches that:

- Are developed in collaboration with community organizations and are responsive to culturally specific needs.
- Demonstrate experience providing financial education and business technical assistance to PCEF priority populations.

OUTCOMES

- Increased investment in home and business energy upgrades.
- Increased workforce and business opportunities for people working in climate-related businesses.

GOAL MEASURES

- 24,000 - 28,000 MT lifetime CO₂e emissions reduced.¹⁹
- 50% of funds go to businesses owned by people who belong to historically under-resourced groups.

INVESTMENT STRATEGY

PCEF will solicit proposals from lending institutions nonprofit organizations and public agencies to:

- Provide loans and matched savings tools for low- and moderate-income homeowners to make energy-related improvements, fund critical home repairs, and leverage federal and state incentives.
- Provide loans for businesses, prioritizing small businesses, to make energy-related building improvements or purchase efficient equipment for commercial use.
- Provide loans, including lines of credit, for businesses owned by members of historically under-resourced groups that produce goods or services that reduce or sequester GHGs to scale up their business operations.

Partners will make funds available at terms that are flexible, low-cost, culturally responsive, and may include conditional forgiveness opportunities for meeting defined benchmarks.

A market needs assessment, including expertise from eligible financial entities and community input, will be conducted to define additional priorities and allocations before programs and RFPs are launched.

¹⁹ Emissions reductions only estimated for the first round of lending. Assumed 70% of loans will support participants in the strategic programs targeting the small commercial, unregulated multifamily, and single-family sectors, and savings from these loans are already captured in the goal measures in the respective programs. Remaining loans are assumed to support projects similar to those described in the small commercial, unregulated multifamily, and single-family strategic programs.

ELIGIBILITY FOR ROLES

Who may apply to administer funds:

- Nonprofit organizations with a track record of managing financial transactions.
- Entities registered as CDFIs.
- Cooperative credit unions.
- Lending institutions with a physical branch presence in Portland.
- Public agencies based in Portland with financing programs for commercial and multifamily properties.

All funding administrators must provide the following program needs:

- Manage consumer and/or business financial transactions.



“A legacy of discriminatory and predatory practices by traditional banking institutions have created distrust in many low-income, communities of color, and immigrant communities. Innovative financing tools are needed to address these disparities in ways that are flexible, responsive to the community, accountable, and fair.”



Strategic Program 15 – Federal Climate and Equity Funding Opportunities

FIVE-YEAR FUNDING ALLOCATION: \$20,000,000

DESCRIPTION

There are federal and state grant opportunities involving decarbonization, provision of public services, and social equity outcomes that can be applied for by municipal entities. Allowing City of Portland bureaus and offices to leverage PCEF funds for purpose-aligned projects will increase the impact of PCEF's resources and benefit to PCEF priority populations.

The next few years are a time of historic investment and opportunities in climate action, with billions of federal dollars available through dozens of programs and initiatives funded by the IRA and BIL. These include programs for building energy retrofits, climate resilience, and brownfield solar development through the Department of Energy; community-focused transportation safety infrastructure and decarbonization from the Department of Transportation; and pollution reduction and environmental justice efforts through the Environmental Protection Agency. The [Justice40 Initiative](#) being implemented at the federal level sets targets and approaches to ensure that funding reaches low-income census areas and provides good paying jobs. A primary pathway for accessing much of this funding is through grant applications from public entities.

Federal and state grant match funding requirements vary but are often in the range of 25-50% of requested funds. In addition to grant funding, through tax provisions passed in the IRA, municipal governments are now eligible to receive tax credits for energy-related projects through "direct-pay" mechanisms that allows tax-exempt entities to claim the value of a tax credit as a direct payment from the IRS. PCEF can fund projects that have clear social equity and community benefit outcomes and align with climate goals at a time when City budgets cannot otherwise support the match requirements.

To guide this City-focused funding category, a PCEF-managed rapid response workgroup will review grant opportunities, review requests for match funding, and make match funding awards. The workgroup will use the CIP's equity + climate framework to provide guidance in making match funding awards. The workgroup is intended to respond quickly to match funding requests (i.e., less than two-week turnaround for requests) in alignment with the equity + climate framework. The workgroup will not develop grant proposals or directly manage awarded funds. The workgroup will be composed of one person from each of the following: Office of Government Relations staff, PCEF staff, PCEF Committee member, BPS Climate policy staff, and Office of Management and Finance staff. The workgroup's decision-making approach will be determined at a later stage.

The workgroup must evaluate the following elements of the CIP's equity + climate framework when making match award decisions:

- *Benefits to frontline communities.* Will the program create clear, significant, and measurable benefit to frontline communities?

- *Community leadership.* Are there meaningful opportunities for community members to participate in decision making and/or provide leadership in program implementation? Does the program invest in building capacity within communities most impacted?
- *Implementation feasibility.* Can the program be realistically implemented at scale with existing City staff, partners, or contractors over five years?
- *Climate impact: GHG emission reductions.* Will the program result in meaningful and measurable GHG emission reductions/sequestration?
- *Accountability.* Do accountability mechanisms exist to ensure that communities of color, low-income populations, people with disabilities, and other vulnerable communities benefit from the strategic program? Is this program additional to existing or planned efforts?

OUTCOMES

- Increased City investment in decarbonizing buildings and infrastructure while reducing emissions throughout the city.
- City bureaus or offices requesting match funding must articulate additional draft outcomes in their request for match funding. Once applications are approved for federal or state funding, the receiving City bureau or office will be required to finalize outcomes prior to the disbursement of funds.

GOAL MEASURES

- City bureaus or offices requesting match funding must articulate draft goal measures in their request for match funding. Once applications are approved for federal or state funding, the receiving City bureau or office will be required to finalize specific investment goals prior to the disbursement of funds.

INVESTMENT STRATEGY

\$20 million in PCEF funds will be available to City bureaus or offices for the purpose of leveraging additional climate-related funding opportunities. Bureaus and offices will provide proposals with adequate time for review and consideration by the workgroup and indicate the amount of funding required and decision timeframe. The workgroup will review and determine funding allocations on a rolling basis using PCEF's equity + climate framework, recognizing the timeline needs for grant applications.

PCEF will maintain information about what portion of funds from this strategic program have been committed to grant opportunities, and what is available at a given time. Bureaus and offices applying for funds will communicate whether a grant application was awarded or not, and the available funding pool will be adjusted accordingly.

Upon successful award of a funding opportunity, funds would be transferred through Interagency Agreement (IAA) to the recipient bureau or office for implementation of the program or project. PCEF reporting guidelines will be adapted to meet the needs of specific funding requests to avoid duplication of reporting formats.

ELIGIBILITY FOR ROLES

Who may access funds:

- City of Portland bureaus and offices.



Strategic Program 16: Climate-Friendly Public Schools

FIVE-YEAR FUNDING ALLOCATION: \$50,000,000

DESCRIPTION

Youth will inherit the legacy of our decisions on climate and are demanding climate justice and government action to mitigate the catastrophic impacts of climate change.

There are 149 K-12 public schools in six school districts in the city of Portland. These school districts control significant assets in three categories relevant for PCEF funding: 1) buildings, 2) transportation, and 3) school yards. Most of this strategic program investment will be allocated amongst the school districts to implement physical infrastructure projects that reduce GHG emissions and improve climate resiliency. A smaller portion of the funding will be allocated to support student-led initiatives for five years at each middle and high school within the city of Portland.

- *Buildings.* School buildings represent millions of square feet of conditioned space, many in older, inefficient buildings with deferred maintenance. Improvements to school buildings are almost exclusively funded through voter-approved bonds. There is an opportunity to layer PCEF funding onto major improvements and maintenance funding to create higher efficiency, lower carbon schools and resilient buildings. As trusted community-centered places, building upgrades in schools may provide the opportunity to support community members during severe weather events.
- *Transportation.* School transportation also presents a significant carbon emissions and cost reduction opportunity. School busses in Portland are contracted or owned by the district and run primarily on diesel or propane with only a handful of EVs. Electrifying school busses has multiple benefits including reduced carbon emissions, improved air quality, and reduced operating and maintenance costs.
- *Yards.* School yards present an opportunity for green infrastructure for urban canopy, shade, and water management in a space used by both youth during the school day, and the surrounding community throughout the year.

A funding formula approach was used to determine a specific allocation for each school district. This amount must be used on qualifying schools, which are those located within the city of Portland. PCEF worked with school districts operating within Portland and the Oregon Department of Education's (ODOE) student funding formula approach to allocate funding. The approach has been used since 1991 to allocate dollars to school districts to account for increased resources required for specific student needs, including economic disadvantage, special needs, and English language learners. While ODOE calculates funding allocations based on a per-pupil basis, PCEF calculates on a per-school basis recognizing PCEF's investments are place-based.

The funding allocation percent is determined by taking the number of qualifying schools per district (schools with 50% or more of students qualifying for free and reduced lunch and Multnomah Education Service District schools), multiplying each school within the district by its respective weighted factor, and dividing by the total number of points across each school district. Three characteristics make up the weighted factor: geography (east of 82nd and 122nd), free and reduced lunch, and percent of BIPOC students (which are given an additional weight between 1 and 3).

Table 11. Climate-Friendly Public Schools allocation.

School district	Qualifying schools	Allocation for physical improvements (\$)	Middle and high schools in city (#)	Allocation for student-led initiatives (\$)
Centennial	4	\$4,617,500	1	\$75,000
David Douglas	12	\$11,736,146	4	\$300,000
Multnomah ESD	5	\$3,270,729	2	\$150,000
Parkrose	6	\$5,579,479	2	\$150,000
Portland Public Schools	30	\$16,930,833	40	\$3,000,000
Reynolds	3	\$4,040,313	0	\$150,000
Riverdale	0	\$0	2	\$75,000
TOTAL	60	\$46,175,000	51	\$3,825,000

OUTCOMES

- Schools serving PCEF priority populations reduce GHG emissions and are more climate resilient.
- Middle and high school students are engaged in leading climate action.

GOAL MEASURES

- 16,000 – 24,000 MT lifetime CO₂e emissions reduced.²⁰
- Student-led climate initiatives are active in all middle and high schools in Portland.

INVESTMENT STRATEGY

PCEF will allocate funding to each school district through a one-time award for physical improvements and an annual allocation for student-led initiatives.

Physical improvement allocation. After notice of funding amount, each school district will have two years to provide PCEF program staff with a proposal for use of their physical improvement allocation in qualifying schools including:

- Description of proposed clean energy, transportation, green infrastructure and/or regenerative agriculture measures, and estimates of associated GHG reduction.
- Workforce and contractor equity plan.
- Budget and timeline.

PCEF staff will review and approve proposed projects. Up to \$100,000 of each allocation can be used for project planning purposes (and up to \$150,000 if implementing a participatory budgeting process) and can be accessed prior to PCEF approval of the full project. All projects will require standard program reporting and verification based on project type.

²⁰ Building energy savings were estimated using cost per unit savings from energy upgrade data from SB 1149. Transportation emissions reductions were estimated assuming electric buses will replace diesel buses, using fuel efficiency data from the Environmental Protection Agency and Union of Concerned Scientists and average annual mileage of Portland Public School buses.

Student-led initiative allocation. Each school district will also receive an annual allocation of \$15,000 per year for schools with middle and high school grade levels including K-8, K-12, 6-8, and 8-12 in their district that fall within the city of Portland. This allocation is to fund student-led climate initiatives (\$10,000) and to provide modest funding for teacher/district support of these initiatives (\$5,000). Student-led initiatives will not require prior PCEF authorization but must be designed to fit the following parameters:

- Must include decision-making process that clearly demonstrates student empowerment and leadership. For example, decision-making could be made through participatory budgeting, student elective class, and student clubs.
- Must demonstrate connection to GHG reduction or sequestration.
- Must demonstrate connection to one of the PCEF funding areas – clean energy, transportation, green infrastructure, regenerative agriculture, or workforce and contractor development.
- Must be implemented within the city of Portland.

Reporting requirements for student-led initiatives will be flexible to allow student participation in the reporting process and to accommodate creativity and variability in projects. At minimum, schools will provide a short (1-2 page) summary of activities and outcomes, and report on the number and demographics of students involved in the project.

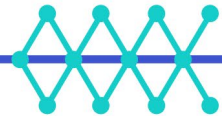
ELIGIBILITY FOR ROLES

Who may receive funding:

- Public school districts within the city of Portland.

APPENDICES

**PCEF diverse contractor and
workforce utilization goals
& Acknowledgements**



Appendix 1: PCEF diverse contractor and workforce utilization goals

PCEF promotes the growth of diverse climate action-focused contractors (i.e., businesses) and workers to better reflect the diversity of our city. PCEF will accomplish this by supporting diverse contractors and workers through CBOs, culturally specific chambers of commerce, apprenticeship programs, labor unions, and other community resources.

PCEF invests and supports the diversification of contractors and workers focused on climate action in four primary ways:

- Contractor and workforce utilization goals.
- Contractor and workforce diversification grants and contracts.
- Reporting and wage requirements.
- Worksite anti-harassment and culture change.

The following describes the CIP diverse contractor and workforce utilization goals.²¹

Contractor diversity goal:

- Applicability
 - Single or multisite contracts with greater than \$350,000 of PCEF resources for hard construction costs.
- A minimum of 30% of the hard total construction costs should be contracted to businesses certified by the Oregon Certification Office for Business Inclusion and Diversity (COBID) as Disadvantaged Business Enterprises (DBE), Minority-Owned Business Enterprises (MBE), Woman-Owned Business Enterprises (WBE), Emerging Small Businesses (ESB), or Service-Disabled Veteran-Owned Business Enterprises (SDVBE). Alternative certifications for MBE, WBE, and DBE will be explored further and considered for eligibility to meet goals.
 - Sub-goal of 20% of hard construction costs contracted to Minority Business Enterprise (MBE), Woman-Owned Business Enterprises (WBE), and Disadvantaged Business Enterprise (DBE).
- 25% of professional services budget contracted with COBID-certified firms.

²¹ These are minimum goals. Specific strategic programs may exceed these goals.

Workforce diversity goal:

- *Single site.* Contracts with greater than \$350,000 of PCEF resources for hard construction costs shall commit to the following goal (excludes subcontracts less than \$100,000).²²
 - Apprentice utilization.
 - A minimum of 20% of the hours worked, by trade, must be worked by state registered apprentices throughout the duration of the project.
- *Single or multisite.* Contracts with greater than \$350,000 of PCEF resources for hard construction costs shall commit to the following goals (excludes subcontracts less than \$100,000).²³
 - Apprentice level/on-the-job trainee diversity goal.²⁴
 - A minimum of 30% of the total apprentice hours, by trade, shall be worked by people of color.
 - A minimum of 15% of the total apprentice hours, by trade, shall be worked by women.
 - Journey level/trades-worker diversity goal.²⁵
 - A minimum of 25% of the total journey level hours, by trade, shall be worked by people of color.
 - A minimum of 10% of the total journey level hours, by trade, shall be worked by women.

²² This will exclude single-family residential, small multifamily residential, and small commercial projects in most circumstances. While single site projects less than \$350,000 will not have specific requirements for workers that are receiving on-the-job training, strategic programs will have incentives to encourage the hiring and retention of new workers.

²³ For projects with multiple sites (e.g., single-family residential projects), contract value will be cumulative across the given program. For instance, if an insulation installer has 50 subcontracts valued at \$10,000 each, for a total value of \$500,000 in the program, they will be subject to the workforce diversity goals.

²⁴ On-the-job trainee is intended to represent new workers receiving on-the-job training for trades that do not have a BOLI registered apprenticeship program.

²⁵ Trades-worker is intended to represent skilled workers that do not have journey-level designation within their trade.

AMENDMENT

to the 2023 Climate Investment Plan



Amendment

Executive Summary

The Climate Investment Plan (CIP) is the Portland Clean Energy Community Benefits Fund (PCEF) five-year plan that guides the program's investments. The CIP was developed through climate research, community engagement, and multiple rounds of input from Portland residents, businesses, technical experts, government partners, and community organizations. Through the CIP, PCEF invests in projects that reduce carbon emissions, create economic opportunity, and help make our city more resilient as we face a changing climate.

In September 2023, City Council unanimously adopted the inaugural CIP, outlining an investment of \$750 million between 2023 and 2028, based on the revenue projections for that period. Since then, PCEF staff and partners have worked to implement the community grants and strategic programs identified in the CIP. The City Budget Office (CBO) also updated PCEF revenue projections, forecasting significantly higher funding available in the five-year CIP period. The purpose of this amendment is to make updates to the CIP in based on early program implementation feedback and incorporate 19 new strategic programs led by City bureaus and funded by PCEF's additional revenue. The new strategic programs are collectively referred to as the 2024 City Climate Projects.

The 2024 City Climate Projects were developed with guidance from City leadership in response to higher forecasted revenue. During the robust community engagement process for the inaugural CIP, stakeholders elevated the need for increased public sector investment in climate action including improved pedestrian and bicycle infrastructure, transit connectivity, increased greenspaces, and citywide street tree care.

Following the passage of the CIP, Commissioner Carmen Rubio directed the Bureau of Planning and Sustainability (BPS) to work with City Bureaus to identify additional climate investments that could be implemented if funds beyond those allocated in the CIP became available. PCEF requested City Bureau leaders provide information on projects that aligned with PCEF criteria and the Climate Emergency Workplan. Bureau submissions were evaluated and prioritized based on the following criteria:

- Meaningful and measurable greenhouse gas (GHG) reduction or sequestration impacts.
- Demonstrable community benefits
- Ability to offset City General Fund expenses
- "Shovel ready": projects are listed in existing capital plans
- "Implementation ready": programs have existing capacity for delivery

In December of 2023, CBO released a memo forecasting at least an additional \$540 million revenue for PCEF over five years. In response, Mayor Wheeler issued a budget guidance memo outlining expectations for PCEF to coordinate with CBO and City bureaus "to propose a considerable amount of funding for existing projects, programs, and services that meet the legal requirements and uphold the

mission of the fund and ensure that we are making the fullest use of these resources.” This direction came at a time when the overall City budget forecast showed significant shortfalls, with projected cuts to many programs, including several critical to advancing climate action.

Shortly thereafter, Commissioner Carmen Rubio released a plan proposing funding allocations for climate-related projects to be implemented by City Bureaus, based on project evaluations conducted PCEF staff. PCEF staff presented the proposed allocations to the PCEF Committee for review and deliberation during a series of public meetings in January, February, and again in November 2024. These meetings included significant public testimony from community members and organizations. While some testimony supported City projects, especially those focused on active transportation and tree care, some expressed concern about allocating significant resources to City Bureaus and advocated for greater funding for community-led projects through PCEF’s Community Grants program.

On Feb. 2, 2024, the PCEF Committee recommended amending the CIP to include funding allocations to City Bureaus for 24 strategic programs totaling \$382,815,000. The adopted PCEF Committee recommendation also included guidance for PCEF staff to:

- Amend the CIP to include the 24 strategic programs, collectively, the “2024 City Climate Projects.”
- Develop metrics, performance measures, eligible expenses, and reporting requirements in the agreements with each Bureau for the strategic programs.
- Provide opportunity for PCEF Committee review and feedback on agreements.
- Include a PCEF Committee liaison in annual progress report and budget review of strategic programs.
- Engage in a two-year public review of performance of the allocated strategic programs with community involvement.
- Require that if PCEF funds are leveraged in relation to hydroelectric facility relicensing, no City funds be used to challenge Tribal nation’s rights or cause harm to salmonids.

The PCEF Committee subsequently recommended a competitive grant solicitation process for the remaining unallocated additional revenue. This solicitation, called Collaborating for Climate Action, seeks to support high-impact, multi-stakeholder projects that deliver equitable climate action solutions over the next five years.

In the spring of 2024, the City Council adopted the City’s FY 2024-25 budget, incorporating a mix of one-time and ongoing PCEF funding allocations based on the Committee’s February 2024 recommendations. The final budget included additions and modifications to the PCEF Committee’s recommended allocations, resulting in a total five-year allocation of \$386,987,000 to City Bureaus. These changes are formalized in the CIP through this amendment and include the following:

- Strategic Program 25 (Portland Housing Bureau): Affordable Housing Energy Improvements and Preservation (\$40 million total).

- \$500,000 sub-allocated to address budget needs for the residential low-income home repair grant program.
- Strategic Program 26 (Bureau of Fleet and Facilities): Increasing City Electric Vehicles and Charging Infrastructure.
- \$3 million added to fund Portland Police Bureau electric vehicles at full replacement cost.
- \$1.17 million added to cover a share of lease costs for the new Swan Island Fleet Maintenance facility.
- Strategic Program 34 (Portland Parks & Recreation): Tree Protection, Care, and Workforce Development.
- Of the \$100 million allocation initially proposed for new programming, \$35 million is reallocated to address existing budget needs for arborists, tree inspectors, and staff responsible for tree care in parks and public spaces.

The budget also included a one-time transfer of PCEF interest to the General Fund to address City budget obligations. In June 2024, City Council adopted the FY 2024-25 budget, including the 2024 City Climate Projects.

Through multiple rounds of input and narrative review with relevant City Bureau staff, PCEF staff developed the strategic program descriptions contained in this amendment. To streamline administration, some of the initial 24 programs were consolidated, resulting in a total of 19 distinct and new strategic programs.

In October 2024, the PCEF Committee met to provide feedback on the program descriptions. Since then, PCEF staff have continued to develop formalized agreements with funded Bureaus that outline responsibilities, expected outcomes, metrics, and reporting requirements for each strategic program.

In addition to the 2024 City Climate Projects, this amendment addresses the following needs identified by City staff and recommended by the PCEF Committee on Nov. 21, 2024:

1. Corrects tabulation errors in the original CIP related to Strategic Program 16: Climate-Friendly Public Schools, without changing the program's overall funding.
2. Increases funding for the Community Grants program by \$120 million to address significant demand, as demonstrated during PCEF's 2023 Community Grants Cycle.
3. Adjusts the CIP end date to June 30, 2029, aligning it with the City's fiscal year instead of the original date of Oct. 31, 2028.
4. Amends the Tree Canopy Maintenance Reserve to focus on private property trees given the development of new, larger programs targeting street trees (SP 34).
5. Updates the naming of the Tree Canopy Maintenance Reserve to "Strategic Program 36: Tree Canopy Maintenance Reserve" to align with the naming conventions for other strategic programs.
6. Addresses inflationary impacts for a subset of 2024 City Climate Projects that would have historically received Current Appropriation Level (CAL) Target adjustments, increasing funding

for these projects by a combined total of \$12.3 million. This includes PBOT's LED Streetlighting program, Portland Parks and Recreation's Tree Protection and Care program, and Bureau of Environmental Services Green Stormwater Infrastructure and Watershed Health program.

7. Adds Cooling Portland, a pre-CIP program, as a strategic program (SP 37) and increases its funding by \$10.3 million due to the program exceeding goals significantly ahead of schedule. This allows the program to effectively leverage five-year program administration resources to deploy 10,000 additional portable heat-pump cooling units through 2026.
8. Budgets \$300 million for the Collaborating for Climate Action funding opportunity. This represents an additional \$142 million allocation in addition to the original \$158 million for this funding opportunity established in March 2024 due to the demonstrated significant funding demand.

This amendment additionally establishes a \$12 million contingency fund for inflationary adjustments for the 2024 City Climate Projects.

Overall, this amendment to the CIP formalizes the strategic programs that comprise the 2024 City Climate Projects, provides a framework for tracking the resulting climate and community benefits, and addresses numerous administrative and performance-based updates to the CIP.

The additions and updates included in this amendment will advance the City's progress toward meeting its 100% renewable goal and contribute to critical climate actions outlined in the Climate Emergency Workplan. Table 1 lists Climate Emergency Workplan actions that are directly or indirectly supported by the 2024 City Climate Projects. Table 2 lists the additional updates captured in this amendment. With this amendment, the CIP is in effect through June 30, 2029, for a total funding allocation of \$1,591,590,328.

Table 1: Summary of 2024 City Climate Project Funding Allocations

City Bureau	Strategic program (SP) name	Total 5-year funding allocation	Climate Emergency Work plan* actions that are directly or indirectly supported by the CIP
Portland Water Bureau	SP 17: Home Water Leak Repair Program Expansion	\$2,500,000	B-3, H1, E-4*
	SP 18: Facilities Energy Efficiency Improvements	\$1,000,000	B-2, B-3
	SP 19: Facilities Renewable Electricity Generation	\$2,825,000	E-1*, E-2*, B-2, B-3, E-2**
Bureau of Hydroelectric Power	SP 20: Portland Hydroelectric Project Powerhouse Infrastructure Upgrades	\$3,500,000	E-1*, B-1, B-2
	SP 21: Portland Hydroelectric Project Relicensing	\$6,000,000	E-1*, B-1, B-2
Portland Bureau of Environmental Services	SP 22: Green Stormwater Infrastructure and Watershed Health	\$70,500,000	F-1, F-2, F-3, F-5, NR-1, NR-2, NR-3, NR-4, IP-1
Portland Bureau of Planning & Sustainability	SP 23: Bureau of Planning & Sustainability - Climate Policy Team	\$2,850,000	E-1*, E-2*, B-1, B-2, B-3, T-3*, T-5*, T-6*, T-7*, RH-2
Portland Housing Bureau	SP 25: Affordable Housing Energy Improvements & Preservation	\$40,000,000	B-1, B-3
Bureau of Fleet & Facilities	SP 26: Increasing City Electric Vehicle and Charging Infrastructure	\$29,172,000	B-2
Office of Arts and Culture	SP 27: Arlene Schnitzer Concert Hall Roof & Cooling Tower Replacements	\$1,000,000	B-1
Portland Bureau of Transportation	SP 28: Streetcar Replacement	30,000,000	T-1*, T-2*, T-3*, T-4*, T-5*
	SP 29: Active Transportation Maintenance & Operations	\$10,000,000	T-1*, T-2*, T-4*
	SP 30: Active Transportation Small Capital Projects	\$20,000,000	T-1*, T-2*, T-4*, LU-1, LU-2
	SP 31: Community Programming, Education, and Encouragement	\$15,000,000	T-1*, T-2*, T-3*, T-4*, T-5*
	SP 32: LED Streetlighting	\$37,000,000	B-2, T-1, T-4

City Bureau	Strategic program (SP) name	Total 5-year funding allocation	Climate Emergency Work plan* actions that are directly or indirectly supported by the CIP
Portland Parks & Recreation	SP 24: Unifying City Urban Forest Services	\$7,000,000	T-1**, T-2**, T-3**, NR-2, NR-4, W-2
	SP 33: Mt. Scott Community Center Resiliency Renovation	\$6,200,000	B-2, H-1, RH-1, RH-2, E-2**, E-4**
	SP 34: Tree Protection, Care and Workforce Development	\$100,840,000	B-3, T-1**, T-2**, T-3**, NR-2, NR-3, NR-4, W-1, IP-1
	SP 35: Transition to Electric Landscaping Equipment	\$1,600,000	B-2, H-2
Total		\$386,987,000	

Strategic Program 17: Home Water Leak Repair Program Expansion

PROGRAM ADMINISTRATOR: PORTLAND WATER BUREAU

FIVE-YEAR FUNDING ALLOCATION: \$2,500,000

DESCRIPTION

Since 1998, the Portland Water Bureau (PWB) has offered free water leak repair services to income-eligible Portlanders. The Water Leak Repair Program aims to remove the financial burden of leak repairs from our customers living with low incomes, helping them save water and money.

By fixing leaks, the program not only saves water, but also prevents avoidable GHGs. Getting drinking water from the source into customers' homes involves large amounts of electricity, treatment chemicals, and infrastructure, all of which have associated emissions. Leaking home water pipes and inefficient appliances waste clean water, cost homeowners' money, and cause avoidable emissions by increasing the volume of water that must be treated and transported. In addition, unaddressed leaks can cause property damage that then necessitates more expensive repairs, material waste, and the associated embodied carbon emissions.

The program is currently delivered through partnerships with the Community Energy Project, the African American Alliance for Homeownership, and Multnomah County's Weatherization program. PCEF's investment will allow PWB to double the number of homes served through this innovative partnership. The program will expand dedicated staffing with a full-time program coordinator and a part-time administrative support position. Sixty percent of PCEF funding will go directly to expanding existing partnerships and developing new partnerships with community organizations to deliver plumbing assistance.

PWB prioritizes the largest and most severe leaks while also considering household income, the impact of the leak on resident health, and the equity impacts of selections. The bureau uses an equity matrix to increase prioritization for areas that are more diverse and lower income than Portland as a whole. English is the most common language spoken by customers currently served through the program; there is opportunity to provide additional program outreach and support to customers whose preferred language is not English. With expanded funding, PWB will bring on at least one additional community partner for outreach and repair coordination that will focus on reaching homeowners who speak languages represented by the [Portland Language List](#).

OUTCOMES

- Decreased water leaks, water waste, electricity use, and associated carbon emissions.
- Decreased water bills and repair costs for low-income and community members living with a disability, easing the burden of homeownership.

- Community members are connected to additional resources through coordination with community partners; funding is stretched by leveraging co-funding opportunities.
- Strengthened relationships between the community, community partners, and the City of Portland.
- Increased overall water savings. Household water savings can range from around 100 gallons to over 300,000 gallons per year, depending on the type of leak identified.
- Decreased service line leaks which can result in roughly 60kg/yr of avoidable CO₂e emissions per household (based on 2022 grid emissions profile). Decreased leaking toilets which can result in roughly 157 kg of CO₂e/yr in avoidable emissions per household. Exact emissions benefits depend on which types of repairs and upgrades are made.
- Energy savings per household which can range from around 70 kWh per year from leaking toilets to around 180 kWh per year for service line leaks.
- Increased cost savings for households. Unaddressed service line leaks can cost households over \$3,000 per year, and leaking toilets can cost over \$600 per year.

GOAL MEASURES

- The expanded program will serve 170 households per year (doubling current average of 84 households per year).
- Depending on the type of repairs made, an estimated annual savings of 5.5 million gallons of water, 10,000 kWh of energy, and 5 metric tons CO₂e.
- The program will form at least one new partnership with a community-based organization.
- PWB will participate in 25 events supporting community engagement and resource sharing among community service providers.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

The expansion of the Home Water Leak Repair program will allow for more opportunities for partnerships with local plumbing contractors. To ensure timely service to community members living with low incomes and from marginalized communities, community partners can contract with any licensed plumber. However, the selection of additional community partners will include assessment of the organizational commitment to working with diverse contractors. As an example of current workforce and contractor equity practices, the African American Alliance for Homeownership has intentionally built and maintained relationships with diverse contractors and refers water leak repair work out to them regularly.

Strategic Program 18: Facilities Energy Efficiency Improvements

PROGRAM ADMINISTRATOR: PORTLAND WATER BUREAU

FIVE-YEAR FUNDING ALLOCATION: \$1,000,000

DESCRIPTION

This project funds energy efficiency improvements to PWB facilities, decreasing emissions and improving the resilience of critical facilities that provide clean and safe water to the city of Portland. PWB has a track-record of implementing energy efficiency projects to reduce facility and equipment energy usage and has identified the opportunity to further increase its energy efficiency efforts to reduce the 87% of PWB Scope 1 & 2 emissions that come from electricity use and burning natural gas.

PWB will improve energy efficiency through:

- An Energy Savings Performance Contract (ESPC) audit for select PWB facilities.
- Improving HVAC operations controls at the bureau's Interstate Operations building.
- Replacing the aging and ineffective gas heating system at PWB's groundwater pump station with a new heat pump.

Energy Savings Performance Contracts (ESPCs) are a commonly used way to guarantee returns on capital investments in energy efficiency. They often realize energy savings of 10-30% of total electricity used. The first phase of the ESPC is a technical audit conducted by a qualifying Energy Service Company that generates a list of opportunities to decrease energy use and anticipated reduction potentials. After the technical audit, PWB will prioritize and implement energy savings measures.

The Interstate Operations building will soon start on a planned remodel, which will decrease building energy use and increase operational efficiency. Because this building houses the Water Control Center and the laboratory, the HVAC is especially complex, as the temperature range inside the lab must be strictly controlled. Improved HVAC controls are a key energy efficiency measure in this project that will decrease natural gas use for heating and electricity use for cooling.

Natural gas heaters have historically made up about 3.4% of measured emissions for the bureau, and in 2022 (the most recently recorded year), they constituted 4.3% of measured emissions. Replacing natural gas heaters with heat pumps decreases emissions in the short run and will lead to zero emissions once the grid is fully decarbonized. The third key component of this project will replace one natural gas heater at PWB's groundwater pump station with an electric alternative.

Together, the energy efficiency gains made through this project will help PWB reach net-zero by 2050 and make critical water facilities more resilient, ensuring clean and safe water supply for Portland residents.

OUTCOMES

- Identification of energy savings opportunities.
- Decreased natural gas use and associated carbon emissions.
- Decreased electricity use and associated carbon emissions
- Improved climate resilience at critical facilities.
- Increased climate resilience of 2010 Interstate Building, which houses a laboratory and computer systems vital to ensuring a clean and safe water supply for the city.
- Identification of energy savings opportunities through Energy Savings Performance Contract technical audit.

GOAL MEASURES

- Decreased natural gas use and increased electrical efficiency at 2010 Interstate Building, resulting in elimination of roughly 44,000 kWh of electricity and 8 metric tons of CO₂e emissions per year (assuming 5% efficiency gain).
- Elimination of natural gas use and increased electrical efficiency at groundwater pump station, resulting in the elimination of roughly 10 metric tons of CO₂e emissions per year.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

For the past three fiscal years, PWB has exceeded the City of Portland's goal of at least 20% of contracts going to businesses registered with Oregon's Certification Office for Business Inclusion and Diversity (COBID). PWB also contributes 1% of hard construction costs to the Community Opportunities and Enhancement Program (COEP), which grants funds to community-based organizations to provide workforce development and business technical assistance. This program aims to increase the number of people of color and women in the trades and to remove barriers for construction firms owned by people of color and women so that they can successfully participate in public contracting.

Local, COBID-certified firms are contracted for the Interstate facility upgrades, and PWB is committed to expanding opportunities for diverse contractors throughout the implementation of Strategic Program 18.

Strategic Program 19: Renewable Electricity Generation

PROGRAM ADMINISTRATOR: PORTLAND WATER BUREAU

FIVE-YEAR FUNDING ALLOCATION: \$2,825,000

DESCRIPTION

PWB will expand locally generated renewable electricity capacity through micro-hydro systems and solar array development, adding to existing renewable energy generation capacity. Renewable electricity generation is an essential component of transitioning the electricity grid to 100% clean energy and reducing electricity-associated carbon emissions. Locally generated renewable electricity increases resilience and decreases the amount of transmission infrastructure needed to bring renewable energy from other locations.

This investment supports the following core project elements:

- Construction of a new micro-hydro system at PWB’s reservoirs in Washington Park.
- Maintenance and repairs to existing micro-hydro system at Vernon Hydropark.
- Site assessment, design, and construction of new solar arrays at PWB facilities.
- Maintenance of existing PWB solar arrays to keep them operating at peak capacity.

Since 2007, an average of 84% of the PWB’s emissions have come from electricity use.¹ PWB’s full emissions inventory can be explored in our [interactive dashboard](#). PWB currently generates around 500,000 kWh of renewable electricity per year, equal to about 2.4% of our total electricity use. As part of its Net Zero Strategy, PWB aims to generate 4 million kWh of renewable energy per year, equal to about 8% of its 2050 electricity use.

Expanded renewable generation capacity will allow PWB to reduce emissions while continuing to provide clean and reliable water to the Portland community. Electricity generation from each renewable project will be reported and published as part of the PWB’s [carbon footprint reports](#).

OUTCOMES

- Expanded renewable electricity generation capacity at PWB facilities with associated reduction in GHGs.
- Small contribution to the accelerated regional transition to 100% renewable electricity.
- When paired with battery storage, potential in increased resilience against grid disruptions and ability to continue critical operations without relying on diesel generators.
- Maintenance on existing micro-hydro and solar facilities ensures continued generation capacity of these systems.
- Analysis of potential for community solar projects.

- Based on 2022 grid emissions profiles, every 555 W solar panel PWB builds will avoid roughly 165 g of CO₂e per year. Every acre of solar panels that PWB can construct will avoid an estimated 129 metric tons of CO₂e from being released into the atmosphere per year.
- Identification of new sites for solar generation and installation of solar arrays.

GOAL MEASURES

- A new micro-hydro turbine at Washington Park will generate an estimated 255,000 kWh of clean electricity per year, avoiding more than 43 MT of CO₂e in its first year.
- Vernon Park micro-hydro turbine continues to produce approximately 145,000 kWh of clean electricity per year, avoiding an estimated 42 MT of CO₂e annually (based on 2022 grid emissions profile).

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

PWB has contracted with a registered MWESB firm to serve as the General Contractor for the design and construction of the Washington Park Micro hydroelectric project. For the past three fiscal years, PWB has exceeded the City of Portland's goal of at least 20% of contracts going to businesses registered with Oregon's Certification Office for Business Inclusion and Diversity (COBID), and PWB is committed to expanding opportunities for diverse contractors throughout the implementation of Strategic Program 19.

Strategic Program 20: Portland Hydroelectric Project Powerhouse Infrastructure Upgrades

PROGRAM ADMINISTRATOR: PORTLAND WATER BUREAU

FIVE-YEAR FUNDING ALLOCATION: \$3,500,000

DESCRIPTION

The Portland Hydroelectric Project (PHP) generates an average of 83,000 MWh of clean electricity per year, sufficient to power 8,000 - 10,000 homes, and preventing the release of over 24,000 metric tons of CO₂e per year (based on 2022 grid emissions profile). PHP operates using two Powerhouses in the Bull Run Watershed that hold the turbines and associated electrical equipment for generating the City's hydroelectric power.

PCEF funding will enable upgrades to critical electrical elements of the Powerhouses which are necessary to sustain generation of the City's hydroelectric power. The current infrastructure is over 42 years old and likely to fail if not replaced in the coming years.

The project will replace the following components which are necessary for electricity generation:

- *Alternating Voltage Regulator (AVR) at Powerhouse 2.* The AVR is the controlling unit, or brain, for establishing and maintaining the electrical field when the Powerhouse is generating electricity.
- *Governor Units at both Powerhouse 1 and 2.* The Governor Units control the flow rate of water into the turbines. These very complex units require full replacement as there are no new parts being manufactured due to the age of the equipment. The two new Governor Units will also increase efficiency by 5-8% in Powerhouse 1 and 7-15% in Powerhouse 2, depending on flow levels through the turbines. The efficiency gains are higher for Powerhouse 2 due to a different type of turbine.

These critical upgrades will allow for the continued production of renewable electricity for the city of Portland and help to reach key climate targets for decarbonizing our electricity supply.

OUTCOMES

- Prevention of critical failures and associated emergency expenses.
- Continued and more efficient production of clean energy for the regional grid.
- Reduced need for more energy projects and transmission lines to be built elsewhere. PHP currently provides electricity equal to roughly 140 acres of solar arrays. However, hydropower is much more flexible than solar and can be ramped up or down in relation to electricity demand, further enabling the broader transition to 100% low carbon electricity.

GOAL MEASURES

- Continued generation of an average of 83,000 MWh of clean electricity per year.
- Increased generation efficiency by 5-8% at Powerhouse 1 and 7-15% at Powerhouse 2 (depending upon the flow levels through the turbines).

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

The Hydroelectric industry is a unique and niche industry in the United States. There is a significantly limited number of contractors and equipment manufacturers that work on or produce equipment for the hydropower community as compared with other industries. The Bureau of Hydroelectric Power subcontracts with Energy Northwest (ENW) for the maintenance of its facilities, and ENW will be the general contractor on these electrical upgrades.

While the pool for contractors and manufacturers in the hydroelectric industry is limited, there is strong union representation. Most of the trades in the hydroelectric field are unionized (e.g., IBEW, Pipefitters, Millwrights). In addition to the larger unions in the field, there are many smaller more specialized unions that are specific to certain types of equipment and machinery created and utilized. As such, the assembly and installation portions of this project will primarily be accomplished by unionized trade employees.

Strategic program 21: Portland Hydroelectric Project Relicensing

PROGRAM ADMINISTRATOR: PORTLAND WATER BUREAU

FIVE-YEAR FUNDING ALLOCATION: \$6,000,000

DESCRIPTION

The City is applying for a new federal license to continue operating the Portland Hydroelectric Project (PHP) in the Bull Run Watershed, which is the primary drinking water supply for Portland and the surrounding area. The Bull Run drinking water system has existed since 1895 and includes two dams and two reservoirs, constructed in 1929 and 1962. The drinking water system continues to be the primary purpose of the dams and reservoirs. The PHP was added in the early 1980s and operates on the same dams and reservoirs. Generating clean energy is a supplemental benefit of operating the drinking water system. The PHP also benefits the drinking water system by providing operational flexibility, capacity, and resiliency that has helped enable the drinking water system to adapt to changing conditions, laws, and operational constraints.

The original license for PHP operations was issued in 1979 and is set to expire in 2029. To renew the license, the City has initiated a five-year regulatory process. Because the hydroelectric facilities are integrated into PWB's water supply infrastructure, the cost for the relicensing process will be shared between PWB and PHP. PCEF funding will pay for the PHP share of relicensing costs.

PHP generates an average of 83,000 MWh of clean electricity per year, sufficient to power 8,000 - 10,000 homes, and preventing the release of over 24,000 metric tons of CO₂e per year (based on 2022 grid emissions profile). Revenue from generation of hydroelectricity funds the hydroelectric operation while excess revenues have been allocated to the City's General Fund. Relicensing ensures that this critical source of clean electricity is available and productive into the future.

The five-year relicensing process consists of scoping (determining the scope of issues for relicensing), study plan development (what will be studied and how), study implementation, development of a draft and final license application, and an environmental analysis, as required by the National Environmental Policy Act.

Relicensing is a public process that includes outreach to inform Tribes, agencies, and other potentially interested parties of the process and opportunities to engage and provide input. Formal Tribal consultation by the Federal government is also required as part of the process. Input and consultation will inform the studies that are conducted, how the studies are conducted, as well as the terms and conditions of the next license. As an example, the City initially proposed four studies (two on fish, one on amphibians, and one on archeological resources) to fill information gaps. Based on input from Tribes and regulatory agencies, the City has modified and expanded those studies. In response to input and requests from Tribes, the City has also added a fifth study to identify properties with traditional religious and cultural importance. For this study, the City will work directly with Tribes that choose to

participate so that the study is conducted, within applicable parameters, in a way that is useful and meaningful to them. The final determination on all required studies is made by the Federal Energy Regulatory Commission (FERC).

Portland's drinking water system, and by extension the PHP, operates under the [Bull Run Water Supply Habitat Conservation Plan](#), which protects and restores aquatic habitat for fish species (salmon and steelhead) listed under the Endangered Species Act and impacted by the drinking water system operations. It includes 49 different conservation measures, including downstream flow and temperature requirements as well as many aquatic habitat restoration and improvement projects. After a decade of implementation, the HCP is meeting or exceeding nearly all anticipated benefits for Endangered Species Act-listed fish and aquatic species.

OUTCOMES

- Continued production of clean energy for the regional grid.
- Opportunity for community input on hydropower operation.
- Consultation with Tribal Nations on hydropower operation through federal relicensing process.
- Accountability and review of environmental impacts of hydropower operations.
- Reduced need for more energy projects and transmission lines to be built elsewhere. The PHP currently provides electricity equal to roughly 140 acres of solar arrays. However, hydropower is much more flexible than solar and can be ramped up or down in relation to electricity demand, further enabling the broader transition to 100% carbon-free electricity.

GOAL MEASURES

- Continued generation of an average of 83,000 MWh of clean electricity per year, sufficient to power 8,000 - 10,000 homes, and preventing the release of over 24,000 metric tons of CO₂e per year (based on 2022 grid emissions profile).

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

The prime contractor for relicensing, HDR Engineering, Inc., was awarded the 2023 Diversity and Inclusion Award for a Large Firm from the American Council of Engineering Companies of Washington. Their approach to partnering with and maximizing State of Oregon Certification Office for Business Inclusion and Diversity Disadvantaged, Minority, Women, Emerging, or Service-Disabled Veteran Owned Businesses (D/M/W/E/SDV/ESB) opportunities includes routinely creating and attending diversity events (virtually and in person), providing business development opportunities, using staff augmentation in technical roles with strong advisory collaborations to build new relationships and find meaningful roles for certified firms, and extensive mentoring efforts.

The current contract includes 24% for D/M/W/E/SDV/ESB subconsultants. This commitment will help to improve overall capacity and experience for D/M/W/E/SDV/ESB consultants operating in the relicensing arena.

In addition, the City expects to work directly with Tribal governments that elect to participate in the study regarding properties of traditional religious and cultural importance. The total estimated budget for this study is \$250,000.

Strategic Program 22: Green Stormwater Infrastructure and Watershed Health

PROGRAM ADMINISTRATOR: BUREAU OF ENVIRONMENTAL SERVICES

FIVE-YEAR FUNDING ALLOCATION: \$70,500,000

DESCRIPTION

The Bureau of Environmental Services (BES) is one of the largest bureaus in the City of Portland, responsible for planning, operating, maintaining, and improving all aspects of the city's wastewater and stormwater systems. To do this, BES relies on natural resources for stormwater conveyance, including the protection and restoration of our shared streams and watersheds. This allows BES to meet water quality objectives, reduce risks to public health, and contribute to the city's climate resilience).

In this strategic program, PCEF invests in a range of BES programming to protect and enhance our natural environment, providing carbon sequestration, climate resilience, and adaptation. The program plants trees, supports watershed health through green stormwater solutions, and protects our rivers and streams while providing health benefits and enhancing livability throughout the built environment.

This allocation supports the following BES program areas:

- The Natural Systems O&M program manages over 800 acres of natural areas and stormwater facilities, planting millions of trees and other plants that significantly contribute to carbon sequestration, biodiversity, air quality temperature regulation, and flood control.
- The Community Rating System (CRS) program improves floodplain management, reduces flood risk, and enhances public safety by collaborating with other bureaus to ensure proper floodplain regulation, natural area protection and restoration, and emergency management preparedness. Achieving and maintaining this FEMA rating reduces flood insurance costs significantly for properties in flood prone neighborhoods, which have high concentrations of PCEF priority populations.
- The Green Stormwater Infrastructure O&M program maintains nature-inspired elements like vegetated planters, swales, and constructed wetlands to manage stormwater efficiently and protect water quality. These green spaces sequester carbon and bring multiple community benefits, such as reducing heat islands, enhancing air quality, and providing aesthetic and recreational value.
- Community engagement supports community-led environmental projects through permitting support, technical assistance, and a suite of community grant programs such as [Percent for Green](#), [Community Watershed Stewardship Grants](#), and [Mini-Grants](#).
- The Private Property Retrofits Program (PPRP) helps property owners implement stormwater management solutions on private properties. Residents are empowered with knowledge and resources to manage stormwater on their properties, thereby qualifying for [stormwater discount](#)

[programs](#). Approximately \$30,000 per year will assist income-qualified homeowners with drainage improvements, in partnership with PHB's Neighborhood Housing Preservation program (3-6 projects annually).

- Surface Water Restoration Design provides engineered solutions to restore the ecological functions and public values derived from Portland's river and wetland systems that have been impacted by urban development. Surface Water Restoration Design projects directly support municipal flood management, transportation and public safety, and listed species recovery. Restoration projects are typically prioritized in historically marginalized neighborhoods.
- The BES Biological Sciences team provides habitat and wildlife management expertise, direction, and leadership to protect natural resources, to meet and inform regulatory requirements, and to increase climate change resiliency of Portland's natural systems. The program leads protection of wetlands that sequester carbon and sets strategic direction on invasive species control, including a strong focus on community involvement, particularly in underserved areas.
- PBOT's Maintenance & Operations Collection System removes debris from storm sewers and storm drains to reduce pollution, flooding, and sewer overflows, reducing risk to people and property.

Healthy rivers, wetlands, and floodplains are essential elements of the City's [Climate Emergency Workplan](#). BES teams work to develop city policy to manage invasive species, protect wetlands, and prevent development on critical habitats. Collectively, the efforts of this program store carbon, increase shade, enhance wetland functionality, reduce wildfire and flood risks, and much more. BES' focus on historically under-resourced areas improves both ecological and community health and increases resilience in the face of climate change.

OUTCOMES

- Increased climate resilience through nature-based mechanisms that sequester carbon, mitigate heat island effects, restore natural hydrology, and manage the impacts of flooding.
- Reduced frequency of combined sewer overflows.
- Enhanced public health and safety through minimized risk of service interruptions and environmental hazards.
- Improved water quality and ecosystem health.
- Land reclamation and nature-scaping in low-income areas. Creation of urban microhabitats that improve local biodiversity through the installation of green stormwater infrastructure like rain gardens and permeable pavements.
- Increased access to urban natural areas with associated physical and mental health benefits derived from human connection to nature.
- Increased safety and reduced cost of flood insurance for residents in flood-prone areas.

- Increased community involvement in environmental stewardship and sustainable practices. Educational opportunities and practical experience in green infrastructure projects for youth and marginalized communities.
- Maintains high standards for City-owned green stormwater infrastructure assets through regular inspections and maintenance, ensuring optimal performance and longevity.
- Tracking and visualization of water quality over time in relation to beaver dams.
- Tracking of acres restored, invasive species removed, and native plantings through partnerships with community organizations
- Tracking outreach efforts and events, including:
 - Collaboration with Community Engagement Liaisons to conduct in-person outreach to communities with primary languages other than English.
 - Outreach events (presentations, conferences, tours) related to the Green Street Stewards program.

GOAL MEASURES

- Three maintenance visits and/or inspections per green street per year.
- New streambank stewarded (in linear feet), by watershed.
- New acreage stewarded, by watershed.
- Planting 25,000 trees and 25,000 shrubs over five years, tracked by watershed.
- Host annual plant identification workshop for Spanish-speaking communities.
- Deliver 1,600 educational programs over 5 years.
- Involve at least 40,000 participants and volunteers in community events, workshops, stewardship projects, and restoration events over 5 years.
- Award at least \$500,000 in grants over the permit term (annual goal: \$100,000).
- 65 private property retrofit projects through program partnerships.
- 1.6 acres of impervious area managed on private property.
- 225 technical assistance cases managed through various channels such as hotlines and emails.
- Number of new households receiving funding for Backyard Habitat Certification.
- 74 new acres managed.
- 25,000 native plants provided.
- At least 15 sampling events across 15 waterbodies for zebra and quagga mussel surveying in partnership with the Port of Portland, Portland State University Center for Lakes and Reservoirs, US Army Corp of Engineers, and the Port of Portland.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

This program not only focuses on environmental outcomes but also works to ensure that the economic benefits of its initiatives are equitably shared among the community, particularly in supporting workforce diversity and providing fair contracting opportunities. Examples of workforce and contractor equity initiatives include (but are not limited to):

- Collaborating with entities like Wisdom Workforce Development, R. Franco Restoration, and Relay Resources to offer training and employment opportunities. These partnerships focus on skill training in natural area stewardship, seed collection, planting, and maintenance services. The Louis Stokes Alliance for Minority Participation (LSAMP) Program provides internships that support underrepresented groups in STEM fields.
- Contracting with Portland State University to foster a local, diverse workforce through providing student and early-career opportunities in ecological fields. This includes hands-on experience in invasive species management and other critical environmental areas.

Strategic Program 23: Bureau of Planning & Sustainability - Climate Policy Team

PROGRAM ADMINISTRATOR: BUREAU OF PLANNING & SUSTAINABILITY

FIVE-YEAR FUNDING ALLOCATION: \$2,850,000

DESCRIPTION

The BPS climate policy team are the architects and stewards of the City's climate action plan in line with adopted City Council policy. These are the only policy staff at the City that specifically focus on Portland's communitywide decarbonization, in addition to the decarbonization of the City's own operations and facilities.

The BPS climate policy team grounds its work in the best practice of cities across the world who are most active in fighting climate change. Portland must do its part to reduce emissions sufficiently to prevent the planet's systems from reaching an irrevocable tipping point. Our local carbon reduction targets align with the global requirement to keep temperatures below 1.5-2 degrees Celsius (the foundation of the Paris Agreement, to which the US is signatory). Above this threshold, our collective efforts and investments in resilience, even with PCEF's substantial contributions, will be unable to meet the need.

Local governments have a range of policy tools at their disposal. The BPS climate policy team focuses on solutions available at the local level, while engaging with state, federal, and international jurisdictions that also control critical levers of policy change.

PCEF funds will support BPS climate staff work on decarbonization in the following specific policy areas:

- Community-based renewable energy.
- Decarbonizing transportation and fuels.
- Eliminating carbon from buildings (with a focus on multifamily naturally occurring affordable housing).
- Decarbonizing City operations and facilities.

BPS climate staff will present a final progress report on the City of Portland's 2022-2025 Climate Emergency Workplan in 2025. Staff will advise the incoming Sustainability and Climate Commission and inform the City's next climate action plan that will steer Portland's decarbonization strategy through 2030. The Climate Emergency Workplan and next climate action plan are critical tools to provide City officials and agencies with actionable steps to achieve and be accountable for climate targets.

The BPS climate team maintains multiple accredited greenhouse gas inventories, including the only communitywide inventory for Portland and Multnomah County, in accordance with global accounting and reporting protocols.

Analysis shows that half of the carbon emissions Portland produces locally comes from heating, cooling, and powering our existing buildings. This team seeks to enact climate and health standards that would cover the largest buildings in Portland, which emit about 50 percent of building sector carbon emissions.

BPS Climate Policy staff also manage Portland's Renewable Fuel Standard (Portland City Code Chapter 16.60) which reduces dependence on nonrenewable fossil fuels by increasing the percentage of renewable fuels blended with petroleum diesel sold in the City of Portland. The required percentage of renewable fuel increases annually so that by 2030, all diesel fuel sold in the City will be 99% renewable. Diesel fuel combustion in vehicles and off-road equipment is the fourth largest source of carbon emissions in Portland, representing about 14 percent of total local emissions and 35 percent of transportation emissions. Replacing petroleum diesel is a critical component of Portland's pathway to decarbonization, and a key area of work supported by this funding allocation.

The transformative, science-based, community-informed policy solutions embedded in this team's workplan have the potential to materially advance Portland toward City Council's adopted carbon emissions reduction goal of 50% reduction (below 1990 levels) by 2030 (Resolution No. 37494.)

OUTCOMES

- Community-wide carbon emissions reductions, which are an essential component of community resilience.
- Energy bill reduction opportunities from energy efficiency and community solar, an important component of housing stabilization.
- Climate and health standards in existing rental housing that help protect renters from extreme heat events.
- Air quality improvements (for example, reduction in airborne particulate matter from the Renewable Fuel Standard).
- Community-centered and community-led policy making (for example, climate and health standards, electric vehicle code improvements for multifamily apartments).
- Policies that complement and amplify investments that PCEF makes (for example, climate and health standards, multifamily benchmarking, EV-ready infrastructure, and other zoning code changes).
- City bureaus strategically work together to reduce energy consumption, electrify, and decarbonize their operations.
- The BPS climate team maintains multiple accredited greenhouse gas inventories, including the only communitywide inventory for Portland and Multnomah County, in accordance with global accounting and reporting protocols.
- Reduction in percentage of households that are energy burdened from current 26% (75,258 households). Energy-burdened is defined as spending over 6% of income spent on energy bills.

- Prioritize renewable resources over the purchase of RECs with the intention of reducing reliance on RECs during the transition to 100% renewable resources over time.

GOAL MEASURES

The BPS climate policy team's extensive scope of work supports the overarching goal of achieving community-wide greenhouse gas emissions reductions (total and per capita), to attain the City of Portland goal of 50 percent reduction in total emissions over 1990 baseline by 2030. The goal measures below reflect a sampling of key indicators of success across the various policy areas supported by this funding allocation.

- Publish final progress report on the City of Portland's Climate Emergency Workplan.
- Publish the Multnomah County Carbon Emissions Inventory annually.
- Shape and inform City of Portland's next climate action plan in collaboration with the Sustainability and Climate Commission.
- 100 percent of covered entities complying with Renewable Fuel Standard.
- Meet RFS targets: 15% blend in 2025, 50% blend in 2026, and 99% blend in 2030.
- Develop a Citywide Energy Strategy recommendation for the Sustainability and Climate Commission.
- Provide technical resource assistance to six City bureaus for energy efficiency, renewable generation, and electrification.

Strategic Program 24: Unifying City Urban Forest Services

PROGRAM ADMINISTRATOR: PORTLAND PARKS & RECREATION

FIVE-YEAR FUNDING ALLOCATION: \$7,000,000

DESCRIPTION

The PCEF allocation to Portland Parks & Recreation (PP&R) will provide for continued implementation of private property tree planting and establishment program, previously managed by Bureau of Environmental Services (BES). The private property tree program particularly helps multifamily, commercial and industrial properties plant and care for trees that provide shade as well as valuable stormwater and habitat value, with a focus in North and Northeast Portland. This shift in program responsibility to PP&R Urban Forestry is in accordance with the City services areas as part of the transition to the new form of government.

Within the strategic program, these program deliverables will include:

1. Completion of establishment care for 2,000 trees and 700 shrubs planted prior to July 2024 by the BES tree program and capital projects. Establishment care for trees consists of five years of care, including four years of summer watering, mulching, one structural pruning, monitoring, and replacement of dead trees. Establishment care for shrubs includes up to two summers of watering. Of the trees, 80% are on private property and 20% are in the right-of-way. This work will fulfill City commitments to property owners who opted into the previous BES tree program.
2. Plant and establish approximately 2,000 additional trees on private property. PP&R will develop and/or expand programs to reach priority communities where trees are needed the most. Program development and expansion will be managed alongside the [Portland Clean Energy Fund Equitable Tree Canopy](#) program so that planting efforts can be streamlined, efficient, and programs can work together towards PCEF goals. Tree planting will occur from FY26-FY29. Final tree count will depend on contractor cost and program development. New contracts will need established to meet PCEF wage requirements. Funds for establishment will need encumbered for future years beyond FY29 to complete watering.

OUTCOMES

The overall outcomes of this strategic program are increasing and maintaining tree canopy and shrubs on private properties, predominately located in East and North Portland in commercial, industrial, and multifamily zoned properties. These areas are in high need of tree canopy and often receive poor establishment and maintenance. Once successfully established, trees will thrive and grow with minimal care. Outcomes include:

- Successful planting and establishment of additional trees on private property in PP&R Urban Forestry (UF) [priority service areas](#) (areas with low canopy, low incomes, and high percent residents of color). The PCEF Equitable Tree Canopy Work Group (ETC) will advise on geographic distribution.
- Progress towards Citywide tree canopy goals, and greater access to shade and cooling effects of trees for people who live and work in East and North Portland.
- Increased community education and outreach of the benefits and opportunities for private property tree planting in PP&R UF [priority service areas](#).
- Increased tree planting and establishment contract opportunities, with a focus on engaging [COBID](#)-certified firms (firms registered with Oregon’s Certification Office for Business Inclusion and Diversity).

GOAL MEASURES

The private property tree program will continue the obligations made under previous program implementation and expand tree canopy opportunities, including:

- 2,000 existing trees in the program receiving continued establishment, watering, and care.
- 700 existing shrubs receiving watering for at least two years.
- 2,000 additional trees planted and established on private property.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

This strategic program includes an estimated \$3,581,000 in contracting for services related to tree planting and establishment. UF’s goal is to utilize [COBID](#) certified firms to conduct tree planting and establishment work and will bring existing contracts from BES into compliance with PCEF wage and reporting standards.

PP&R has multiple tree planting and outreach contracts in place that meet goals for diverse contractor and workforce goals. The majority of planting and establishment contracts are held by [COBID](#) certified firms (Certification Office for Business Inclusion and Diversity). These include two price agreements (one [COBID](#) certified), three direct contracts with [COBID](#) certified firms, and four outreach contracts with community organizations serving BIPOC communities and east Portland.

PP&R provides bilingual technical training, mentoring, and support for tree planting and establishment contractors, and has dedicated training and contractor development staff for supporting contractors. The team focused on contractor development within PP&R maintains workforce development relationships with centered community organizations, focuses recruitment for centered communities, provides job application support, and extensive on –the-job training including technical skills and equity and anti-racism trainings.

Strategic Program 25: Affordable Housing Energy Improvements and Preservation

PROGRAM ADMINISTRATOR: PORTLAND HOUSING BUREAU

FIVE-YEAR FUNDING ALLOCATION: \$40,000,000

DESCRIPTION

The mission of the Portland Housing Bureau (PHB) is to solve the unmet housing needs of the people of Portland. PHB is responsible for leading housing policy for the City of Portland and administering programs to produce affordable rental housing, increase and stabilize homeowners, prevent and end homelessness, and regulate and assist landlords and tenants in the rental housing market.

One of PHB's key program areas is financing the construction and preservation of affordable housing through both direct financing and indirect subsidies like tax exemptions and fee waivers. PHB-funded housing is required to remain affordable at targeted incomes for up to 99 years. PHB currently oversees a portfolio of nearly 15,000 units of affordable housing throughout the city.

PHB and PCEF piloted a preservation-focused collaboration through PHB's [2023 Preservation Request for Interest \(RFI\)](#). Responses to the pilot far exceeded available funding, demonstrating a high level of interest and need. Expanding on the pilot, the Affordable Housing Energy Improvements and Preservation program will formalize this collaborative effort to provide a reliable source of funding for clean energy improvements and other building health and safety upgrades for housing preservation projects throughout the city of Portland.

PCEF funding will be used for energy efficiency, renewable energy improvements and eligible life, health, and safety retrofit costs to address the ongoing need to preserve and update existing regulated multifamily rental housing. Projects currently regulated by the Housing Bureau or Oregon Housing and Community Services (OHCS) would be eligible to apply. These projects include many buildings that were built over twenty years ago before extreme heat events were commonplace in the Portland region. Many more buildings, particularly in the Central City, are over 100 years old and represent historically valuable assets that enhance the character of Portland.

Affordable housing projects eligible for preservation funding serve low-income, vulnerable communities who earn 60% of Area Median Income (AMI) or less. Many buildings house formerly homeless tenants as permanent supportive housing, and all buildings serve priority communities, such as seniors, veterans, immigrants, and refugees reflecting diverse racial and ethnic communities.

Carbon emissions reductions will be achieved by replacing old heating/cooling, ventilation and building envelope systems with high-efficiency systems, upgrading appliances, and adding renewable energy systems where feasible. Preserving and extending the life of existing buildings also provides carbon benefits by continued storage of embodied carbon and avoiding emissions of new construction. These upgrades will also significantly reduce energy costs for building owners and tenants and create a more

comfortable and safe living environment. Under PHB's air conditioning policy, projects will be required to include a cooling strategy, with a strong preference for higher efficiency options as feasible for the building.

Where possible, PHB will pair PCEF with PHB funding sources (e.g., Community Development Block Grant, Construction Excise Tax, Tax Increment Financing) to address additional safety and livability issues and extend the useful life of the buildings. For multifamily projects up to 30% of PCEF funds for construction costs may be available for non-energy efficiency measures, which may be necessary to enable efficiency measures, or which assist in resolving a major health and safety issue in the building.

Projects will be invited via Notices of Funding Availability (NOFA) to request funding for clean energy upgrades and additional energy-efficient systems as part of an overall preservation/rehabilitation scope of work. Each NOFA will pair existing PHB resources with PCEF funds and other local resources as available. To ensure effective implementation, PHB will collaborate closely with building owners, developers, PCEF staff, and OHCS.

While existing regulated multifamily rental housing is the primary focus of this strategic program, energy efficiency and health upgrades to existing regulated single-family rental housing will be supported through a one-time replacement Tax Increment Financing (TIF) funds with \$2 million of PCEF funding in FY 24-25. Of this \$2 million, \$500,000 will be suballocated for the PHB Home Repair grant program. This program provides funding to community organizations to make home repair grants to low-income homeowners, and up to 50% of PCEF funds can be used for non-energy upgrades.

Of the remainder, \$1 million will support security upgrades for existing regulated multifamily rental housing through the PHB Safety and Security Grants program, and \$500,000 will be used for the associated administrative and staffing costs of these two grant programs.

OUTCOMES

For each project, the grantee will be required to submit a scope of work for PCEF-funded measures. Scope of work may include (but is not limited to) the following:

- Building description including number of floors, units, configuration, and use.
- Bid or contractor proposal for planned clean energy upgrades including weatherization, HVAC upgrades, plumbing, venting, and electrification.
- Material specifications including quantity, manufacturer, model numbers, etc.
- Improved energy-efficient heating, cooling, and building envelope systems.

Outcomes of this strategic program overall includes:

- Addition of renewable energy systems in regulated multifamily affordable housing.
- Extension of useful life of buildings to prevent displacement of vulnerable renters.

- Increased resilience for low-income renters who are vulnerable to the impacts of extreme weather events.
- Decreased utility bills for building tenants and owners.
- Contracting opportunities targeted to DMWESB-SDV firms (both hard costs and professional services).
- Renewal of affordable housing regulatory agreements to ensure long-term affordability.

GOAL MEASURES

- Increased energy efficiency in at least 800 units of affordable housing, with potential for more depending on the specific projects selected.
- Approximately 10-18 renewed affordable housing regulatory agreements, depending on the specific projects selected.
- Projects meet or exceed [PHB Equity in Contracting and Apprenticeship & Workforce Diversity Program goals](#).

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

PHB is dedicated to equity in contracting and workforce goals for minority, women-owned, and emerging small businesses on its affordable housing projects. Projects must comply with PHB's workforce and contractor equity programs described below.

Equity in Contracting Program

The intent of PHB's Equity in Contracting Program is to promote best practices and to ensure that PHB housing projects provide business opportunities for DMWESB-SDVBE* construction-focused firms to build economic growth, increase capacity and to expand competition in the marketplace. PHB expects owners/developers awarded PHB funds to understand and emphasize the Aspirational Goals below when selecting a General Contractor ("GC") and professional service providers.

- Hard Cost Goal – a minimum of 30% of the total Hard Construction Costs shall be contracted to COBID-certified firms (GC/contractors or subcontractors).
 - Hard Cost Subgoal – a minimum of 14% of the 30% Hard Construction Costs shall be contracted to D/M/WBE firms (GC/contractors and subcontractors combined).
- Professional Services Goal – a minimum of 20% of the total Professional Services budget shall be contracted to COBID-certified firms.

Apprenticeship & Workforce Diversity Program

PHB's Apprenticeship & Workforce Diversity Program ensures that PHB-funded construction projects offer equal opportunities in employment, and that those who have been historically under-represented in the construction trades have access to jobs through training programs.

Borrowers and their general contractors with project contracts valued at \$300,000 or more and 300 or more jobsite hours in any given trade shall:

- Ensure that 20% of labor hours in each apprenticeable trade is performed by state-registered apprentices.
- Strive to achieve workforce diversity goals of employing women and BIPOC individuals, including aspirational diversity goals for apprentice and journey-level hours worked, including:
 - 22% of the total apprentice hours and 22% of the total journey level hours shall be worked by BIPOC individuals.
 - 9% of the total apprentice hours and 6% of the total journey level hours shall be worked by women.

**DMWESB-SDVBE: Disadvantaged, Minority, Women, Emerging Small Businesses, Service-Disabled Veterans Business Enterprises. Qualified DMWESB-SDVBE firms are certified by the Oregon Certification Office for Business Inclusion and Diversity (COBID).*

Strategic Program 26: Increasing City Electric Vehicles and Charging Infrastructure

PROGRAM ADMINISTRATOR: PORTLAND BUREAU OF FLEET AND FACILITIES

FIVE-YEAR FUNDING ALLOCATION: \$29,172,000

DESCRIPTION

This strategic program will enable [CityFleet](#), the City division responsible for the entire ecosystem of fleet essential services (e.g., acquisition, maintenance, fueling, disposition, compliance), to implement its Green Fleet Strategy to achieve a net-zero carbon fleet by 2050. This allocation will scale up the electrification of both on-road and off-road vehicles/equipment and meet the City's internal climate goals in alignment with the Climate Emergency Workplan.

This program involves multiple elements needed to transition the current liquid fossil fuel infrastructure to a similar, seamless EV infrastructure for City bureaus to maintain their 24/7 operations and serve the public. The core elements include:

- *EV vehicles and equipment, in different vehicle classes and use cases.* Approximately \$14 million of the allocation covers the price premium associated with an EV version of a vehicle due for replacement versus the conventional liquid fuel option. A \$3 million additional allocation is reserved for Police Bureau fleet replacement and is eligible to be used for the full cost of Police Bureau electric vehicles and associated upfitting requirements. Enabling the scaling up of EVs will directly reduce carbon emissions as fossil fuel vehicles and equipment are retired and replaced.
- *EV charging infrastructure and access (including backup/non-grid emergency options).* Approximately \$8.2 million of the allocation invests in EV charging infrastructure to support the growth of City-owned/operated EV on-road and off-road vehicles and equipment. New EV charging infrastructure will be built at sites where City assets currently park overnight and/or fuel. Funds will go towards the City's share of any make-ready costs (costs associated with bringing sufficient power to the site to feed the charging stations), the charging station equipment, and five-year maintenance costs. A portion of the funding will also go towards purchasing mobile and fixed non-grid charging solutions that can support EV charging during an emergency that disrupts the grid, providing critical resilience functions.
- *EV-specific training for vehicle technicians.* This allocation invests in workforce development for City vehicle technicians and is needed to ensure City technicians can effectively and efficiently work on the influx of EVs that will make up the City's fleet over the coming years.
- *EV-specific support staff.* This program will support two additional full-time employees for five years, as dedicated staff roles are needed to facilitate the scaling of the EV acquisition and associated charging infrastructure within the proposed timeline.
- *EV-specific fire-fighting tools/equipment, vehicle diagnostic tools, and EV-related support hardware and software.* A full-scale transition to EVs also requires updates and additions to

support systems such as data/monitoring hardware/software, vehicle diagnostic tools/software, and EV-specific fire suppression equipment for Portland Fire & Rescue.

- *Lease payments.* For the first year of CityFleet maintenance facility on Swan Island.

OUTCOMES

- Direct reduction of GHGs and other tailpipe emissions from City-owned vehicles and equipment.
- Reduction of negative air quality impacts throughout the city. City-owned vehicles and equipment operate throughout city limits, including traveling along major arterial streets and where construction projects are taking place.
- By taking a leadership role in EV fleet transition, CityFleet will be able to share lessons learned with other municipal fleets throughout Oregon and nationally. CityFleet already has strong fleet networks and will leverage these to help other fleets make the EV transition through knowledge sharing.
- CityFleet's EV transition at this scale also supports stakeholders involved in obtaining the required experience to make the EV transition more mainstream for our community (e.g., vehicle dealers, vehicle parts suppliers, electrician workforce, charging infrastructure manufacturing/parts/maintenance).
- Support for workforce development in EV vehicle/equipment maintenance and EV charging infrastructure through select/targeted trainings for existing staff and increasing charging infrastructure work for the City's charging infrastructure provider OpConnect, a BIPOC and Veteran-owned small business that has strong workforce diversity and professional development practices.

GOAL MEASURES

- 300 charging ports (mostly Level 2) at 30 locations will be added or upgraded.
- Expand the number of city sites with dedicated charging ports by 10 by the end of FY29.
- 700 City-owned vehicles or pieces of equipment transitioned to electric versions.
- 30% of the City's fleet is battery-electric-powered by the end of FY29, a 25% increase over five years.
- 50 CityFleet vehicle technicians will receive one or more trainings related to EV technology or safety.
- Reduce GHG emissions by at least 6,000 MT CO₂ during FY25-FY29.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

The workforce and contractor development elements associated with this project are focused on EV vehicle/equipment maintenance and EV charging infrastructure.

CityFleet will be scaling up the City EV fleet and associated vehicle technician training through this project (approximately \$97,494 dedicated to technician training over the five-year PCEF strategic program period).

In 2022, CityFleet completed a competitive solicitation process and awarded a contract for Charging as a Service to OpConnect, a local BIPOC and Veteran-owned small business. City Fleet plans on increasing installation of EV chargers to over 300 ports by the end of FY27. OpConnect has strong workforce diversity and professional development practices and supports local suppliers. Currently, over 50% of OpConnect's full-time employees are a Person of Color or female, and 40% of managerial staff are either a Person of Color or female (with 20% being both).

OpConnect offers additional training, mentoring, technical training, and professional development opportunities to employees. Currently, 70% of the content of OpConnect's charging stations are produced in Oregon, with 100% of metal parts supplied by Swan Island Sheet Metal based in Portland using metals sourced by Oregon-based suppliers and a local Portland area workforce, supporting local jobs in Oregon.

Strategic Program 27: Arlene Schnitzer Concert Hall Roof and Cooling Tower Replacement

PROGRAM ADMINISTRATOR: PORTLAND OFFICE OF ARTS AND CULTURE

FIVE-YEAR FUNDING ALLOCATION: \$1,000,000

DESCRIPTION

The Arlene Schnitzer Concert Hall (ASCH) is Portland's premier large concert hall and is visited by approximately 275,000 people from Portland and beyond each year. The ASCH hosts over 180 diverse events and performers annually and is the primary venue for the Oregon Symphony. The venue is overseen by the City of Portland Office of Arts and Culture, and the ASCH is one of the Portland's Center for the Arts facilities operated by Metro. This PCEF investment reduces the ASCH's climate impact by incorporating energy efficiency upgrades into critical repairs for the historic building.

In conjunction with needed roof replacement, PCEF funding will:

- Increase insulation to reduce the building's energy consumption.
- Replace the aging cooling tower to reduce energy use for cooling.

Metro is collaborating with the City of Portland to support climate action while ensuring the continued operations of this iconic venue.

OUTCOMES

- Increased energy efficiency from additional roof insulation.
- Energy savings from cooling tower replacement.
- Improved energy efficiency helps stabilize Portland's Centers for the Arts reserves.
- Continued long-term use of the concert hall, contributing to Portland's economic impact of over \$77 million in direct and indirect spending, approximately \$33 million in labor income, and over \$4 million in local and state tax revenue.

GOAL MEASURES

- Most roof surfaces insulated to R-value 30, upgrading from current R-values ranging from 0 to 8.
- Replacement of cooling tower with efficient, variable volume model.
- Reduce energy consumption from 83,200 kWh/year to 40,300 kWh/year for a net savings of 42,900 kWh/year.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

- Metro is managing this project and is committed to diversity in employment and contracting. Key targets for this project include:
- A minimum of 22% of total work hours in each apprenticeable trade will be performed by state-registered apprentices.
- A minimum of 9% of total work hours will be performed by women and women identified persons – tracked separately for journey and apprentice-level workers in each trade.
- A minimum of 25% of total work hours will be performed by persons of color – tracked separately for journey and apprentice level workers in each.

Strategic Program 28: Streetcar Replacement

PROGRAM ADMINISTRATOR: PORTLAND BUREAU OF TRANSPORTATION

FIVE-YEAR FUNDING ALLOCATION: \$30,000,000

DESCRIPTION

This strategic program funds a critical need to replace the aging streetcar vehicles which provide an important transit connection for the thousands of residents, employees, and students in Portland's central city. Portland Streetcar is the third largest transit system in Oregon and provides approximately 9,000 rides each weekday using 100% clean energy while supporting the growth of dense, walkable development communities. The Portland Streetcar is owned by the City of Portland through PBOT, while Portland Streetcar Inc. (PSI) is the nonprofit corporation that manages and operates the system.

Much of the streetcar fleet is reaching the end of its useful life (30 years), and the City must begin the process to replace the aging fleet beginning in 2025 in order to continue daily operations in the future and to provide high quality transit to existing and future development sites including the Broadway Corridor, Lower Albina, OMSI, and other key opportunity areas.

This program will fund approximately one third of the cost of replacing twelve streetcars that are scheduled to be retired by 2030, with an approximate current total cost of \$80 million. PBOT will fund the remaining balance with existing and planned resources.

The Portland Streetcar already provides significant carbon reductions by providing a clean, reliable transit option for its daily users and is a core part of the City's low carbon transportation infrastructure. PCEF priority populations are very well served by, and frequent users of, Portland Streetcar. Ridership demographics (2023) show that 35% of streetcar users earn less than \$30k/year and 32% identify as people of color. Thirty-nine percent of all affordable housing in Portland is directly on the Streetcar line. For many riders, the streetcar is a critical, affordable and sustainable transportation option.

Looking to the future, the streetcar will continue to serve existing destinations including the densest census tracts, the largest employers, and the largest educational centers in Oregon – in addition to providing transit connections to known development sites along the existing corridor such as OMSI, Zidell Yards, Lower Albina, and the Broadway Corridor where thousands of new housing units and jobs are expected in the coming decades.

OUTCOMES

- Portland Streetcar is a 100% electric transit system that carries over 9,000 passengers per day (making it the third largest transit system in Oregon) to work, school, medical, and recreation opportunities. Continued operation allows continuation and expansion of these ridership numbers.

- Emissions reductions and co-pollutants avoided annually from VMT reductions based on annual ridership and average trip length.
- Streetcar also serves as a catalyst for new, denser housing development critical for making short non-driving trips possible.

GOAL MEASURES

- Successful purchase of 12 streetcars, ensuring a timely replacement of the aging fleet.
- Daily ridership is expected to increase from approximately 9,000/day in 2024 to 16,000/day in 2030 and beyond – based on expected growth in housing and jobs in the central city and by gaining back riders that were lost during the pandemic.
- Increase in daily riders is anticipated to provide significant carbon reductions, roughly 1700 metric tons of CO2 each year based on known average trip lengths and frequency of use, using the assumption that streetcar trips are replacing gasoline-powered auto trips.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

No specific workforce and contractor development elements are anticipated for this funding allocation. The procurement of streetcars will follow all existing City of Portland standards, and support Made-in-USA goals that are part of the Inflation Reduction Act and Federal co-funding of this program area. The work of constructing the streetcars will happen outside of the region, as there is no longer a streetcar manufacturer located in Oregon.

Strategic Program 29: Active Transportation Maintenance & Operations

PROGRAM ADMINISTRATOR: PORTLAND BUREAU OF TRANSPORTATION

FIVE-YEAR FUNDING ALLOCATION: \$10,000,000

DESCRIPTION

Through this strategic program, PBOT will address the need for more frequent cleaning of almost all of our city's bike lanes, ensuring that people cycling or rolling have better facilities and increasing the safety for people who use bike lanes. PBOT has many bike lanes (both existing and proposed); and community members consistently provide feedback that they do not feel safe using bike lanes when they are filled with leaves, gravel, or other debris due to the current frequency of cleaning, or when they are separated by tubular markers that have not been cleaned or are missing.

These funds will go towards making existing city bike lane assets more usable for the public and will improve the conditions for cycling in Portland. The bike lane sweepers and staff time supported with this funding will go towards cleaning nearly 400 miles of protected and shared bike lanes approximately six times annually. In a review of 39 empirical studies published in peer-reviewed journals between 2007-2017, street connectivity and the presence of cycling paths/facilities are positively associated with cycling behaviors—including commuting cycling and general cycling. The review found consistent associations with large effect sizes between street connectivity and cycling for commuting and transport. Cycling for commuting and small trips (in comparison to trips via motor vehicle) is a well-known carbon emissions reduction strategy, and bike mode split has gone down in comparison to pre-pandemic level. Removing obstacles to maintain and increase ridership supports carbon emissions reduction.

This investment supports the following core project elements:

- Acquisition of two bike lane sweepers, with a preference for electric versions.
- Procurement of electric backpack leaf blowers for supplemental cleaning of bike lanes.
- Ongoing staffing of the maintenance operations associated with servicing bike lanes throughout the city.

The first year of this funding will be largely dedicated to the acquisition of equipment and the hiring of staff. PBOT is being proactive by beginning to assess and demonstrate various models of bike lane sweepers so the acquisition of equipment can be done quickly, and benefits can be seen sooner.

OUTCOMES

- Providing, clean and accessible bike lanes to use throughout the year, increasing usage of bike lanes and bicycle mode share.

- Potential reduction in maintenance costs related to paint and striping over time – specifically green bike lanes/boxes. If bike lanes are free of gravel and debris, the green paint will experience less wear from debris/motor vehicle tire interaction resulting in better visibility and the need to be repainted less frequently.

GOAL MEASURES

- Acquisition of two efficient bike lane sweepers.
- Cleaning of 400 miles of bike facilities six times per year.
- Acquisition of at least two electric powered backpack leaf blowers.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

A total of nine positions will be hired through this funding. All positions are for unionized staff within Maintenance Operations at PBOT, and the positions will be open to external and internal candidates.

All positions supported by this funding will be held to existing PBOT and Citywide workforce goals and commitments. The City of Portland is committed to recognizing and removing the systematic barriers to a fair and just distribution of resources, access, and opportunity, starting with issues of race and disability. PBOT has committed to racial equity goals and strategies that include:

- Ending racial disparities within City government, so there is fairness in hiring and promotions, greater opportunities in contracting, and equitable services to all residents.
- Strengthening outreach, public engagement, and access to City services for communities of color and immigrant and refugee communities, and support or change existing services using racial equity best practices.
- As part of the PBOT Maintenance Operations Strategic Plan, PBOT is developing relationships with workforce development groups including Women in Trades, Reynolds High School, YouthBuilders.

Strategic Program 30: Active Transportation Small Capital Projects

PROGRAM ADMINISTRATOR: PORTLAND BUREAU OF TRANSPORTATION

FIVE-YEAR FUNDING ALLOCATION: \$20,000,000

DESCRIPTION

This strategic program allocation to PBOT's Small Active Transportation Capital Projects will deliver \$20,000,000 over five years to investments in the existing quick build program and focused investment in selected subareas to improve the public infrastructure for biking, walking, and transit access. The PCEF funds may be used to fund project development, community engagement, engineering and design, construction, and post-project evaluation.

The PBOT quick build program delivers small- and medium-scale capital investments to improve the biking, walking, and transit networks. These projects provide community members with safe, convenient ways to get around while reducing GHGs. The projects in the quick build program are drawn from existing plans, including modal plans (e.g., PedPDX, 2030 Bike Plan), subarea plans (e.g., North Portland in Motion, SW in Motion, Lower SE Rising), and community requests.

All community engagement for development and construction of projects will be led by PBOT and will follow Citywide public involvement principles to ensure that authentic, mutually beneficial, and transparent relationships are built and maintained with community members. Project development will follow established PBOT practices utilize the bureau's equity matrix and will conclude with an engineer's estimate and project scope approved by PBOT's Capital Investment Committee.

PBOT will construct projects either through in-house Maintenance Operations (MO) staff or through a contractor through procurement processes that meet PCEF contractor standards. Depending on the project scope, PBOT may conduct activation, evaluation, and close-out activities.

Key projects within this strategic program are:

- *Implement quick build projects.* These projects often have budgets under \$250,000 and are delivered by PBOT Maintenance Operations (MO) staff but can also be larger and delivered under PBOT contracting programs.
- *Implement North Portland in Motion subarea projects.* These projects, developed in close consultation with community, improve access to community destinations and support walking, biking, and transit use in the North Portland peninsula. These projects are small to medium in size, but PCEF funding could also leverage larger grant investments. These projects often have budgets under \$250,000 and are delivered by PBOT MO staff but can also be larger and delivered under PBOT contracting programs.

- *Implement Lower SE Rising subarea projects.* The Lower Southeast Rising Plan, completed in 2024, both changed zoning to allow more opportunities for neighborhood business and affordable housing and identified transportation improvements to make it easier for people to meet their daily needs by biking, walking, and transit. PCEF funding will fund transportation projects identified in this plan. These projects are small to medium in size, but PCEF funding could also leverage larger grant investments. These projects often have budgets under \$250,000 and are delivered by PBOT MO staff but can also be larger and delivered under PBOT contracting programs.
- *Implement 42nd Avenue Bridge active transportation facilities.* PBOT's complete replacement of the deteriorating NE 42nd Avenue Bridge over NE Lombard Street and the Union Pacific Railroad will begin construction in 2025. PCEF will provide the extra funding needed to provide a wider bridge deck that accommodates people walking and biking along this key connection between neighborhoods and employment areas. The new bridge and its approaches will feature a 10- to 12-foot-wide multi-use path on the east side, and a seven-foot-wide buffered bike lane on the west side. Today's bridge which has no ped/bike facilities on its approaches, and narrow, non-ADA-compliant sidewalks on the structure.
- *Install pedestrian crossings, bike "missing links," and transit spot improvements.* This program focuses on programmatic and small projects to fill gaps in our transportation networks that are barriers to people making more trips by biking, walking, and transit. These projects cost less than \$250,000 and are generally delivered by PCEF Maintenance and Operations staff.

OUTCOMES

The overall outcomes of this strategic program are transportation decarbonization through improved infrastructure for biking and walking that supports mode shift. Mode shift is a key strategy to address the 40% of regional GHG emissions that are from transportation. In a review of 39 empirical studies published in peer-reviewed journals between 2007-2017, street connectivity and the presence of cycling paths/facilities are positively associated with cycling behaviors—including commuting cycling and general cycling. The review found consistent associations with large effect sizes between street connectivity and cycling for commuting and transport.

PBOT will prioritize building projects in areas that are identified as equity areas using [PBOT's equity matrix](#), which maps Portland census tracts and assigns a score from 2-10 based on demographic variables of race, ethnicity, and income. These projects come from plans prepared in partnership with community and allow City of Portland to deliver on commitments made in those processes.

Specific project-based outcomes:

- New transportation infrastructure that makes it safer and more convenient to meet daily needs using biking, walking, and transit.
- Closed small, but important, gaps in the biking and walking systems in Portland.

- Reduced delay on the transit network by addressing spots with significant delay.
- Enhancement of biking and walking facilities on the new 42nd Avenue bridge.

Engagement related outcomes:

- Attend one neighborhood or community meeting to discuss each project.
- Send one mailer to adjacent property owners prior to the start of project construction.
- Meet with Bicycle Advisory Committee and Pedestrian Advisory Committee annually to review the proposed projects.

GOAL MEASURES

Each of the capital infrastructure projects deployed will have individual goals and measures related to their specific construction activities. Overall, the strategic program seeks the goal of increasing the percentage of use of low or zero-carbon transportation options.

Program-wide goal measures include:

- Delivery of 6-8 projects annually, depending on the size of the projects.
- Funding allocation by type of improvement.
- At least 20% of funding for projects serve cyclists.
- At least 20% of funding for projects serve pedestrians.
- At least 10% of funding for projects to improve transit speed and reliability.

To ensure the bulk of the funds are spent in areas with the highest demonstrated equity needs, PBOT will use its equity matrix tool with targets for the funds programmed for quick build or implementation of in motion plans:

- 60% of funds will be spent on projects intersecting or adjacent to areas with an equity score of 7 or greater using the PBOT equity matrix.
- 30% of funds will be spent on projects intersecting or adjacent to areas with an equity score of 9 or greater using the PBOT equity matrix.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

All positions supported by this funding will be held to existing PBOT and Citywide workforce goals and commitments and PCEF standards. The City of Portland is committed to recognizing and removing the systematic barriers to a fair and just distribution of resources, access and opportunity, starting with issues of race and disability. PBOT has committed to racial equity goals and strategies, which include:

- Ending racial disparities within city government, so there is fairness in hiring and promotions, greater opportunities in contracting, and equitable services to all residents.

- Strengthening outreach, public engagement, and access to City services for communities of color and immigrant and refugee communities, and support or change existing services using racial equity best practices.
- Collaborating with communities and institutes to eliminate racial inequity in all areas of government, including education, criminal justice, environmental justice, health, housing, transportation, and economic success.

PBOT will either self-perform work or use contractors to deliver PCEF-funded projects. Most commonly, PBOT would use an existing Price Agreement contract or the Prime Contractor Development program that is restricted to firms with State of Oregon Certification Office of Business Inclusion and Diversity ([COBID](#)) certifications.

PBOT may use work order contracts that include non-COBID firms for some specialized work. For larger projects, PBOT may use low bid contracts that any pre-qualified contractor may bid on. In those cases, PBOT currently requires contractors to comply with the Subcontractor Equity Program. This is a City goal for 20% of costs on construction contracts (valued at \$150,000 or above) to go to COBID-certified subcontractors.

In most cases, regardless of the contracting program, contracts or task orders over \$200,000 trigger the Workforce Training and Hiring Program (WTHP). This City program aims to increase women and minority participation in the construction trades through apprenticeship opportunities on City projects. The goals are to have registered apprentices work at least 20% of labor hours per trade, minorities at least 18% of labor hours per trade, and women at least 9% of labor hours per trade.

PBOT also participates in City contracting equity efforts outside the of the procurement process including:

- *Community Opportunities and Enhancement Program (COEP)*. A one percent set-aside of eligible costs on the value of all City construction contracts funds this program administered by Prosper Portland. (PBOT currently pays an annual fee in lieu of General Transportation Revenue). The program aims to increase the number of people of color and women in the construction trades and to remove barriers for construction firms owned by people of color and women so that they can successfully participate in public contracting.
- *Fair Contracting Forum and Outreach*. Procurement Services hosts a monthly Fair Contracting Form for equity contractors and trade unions to interface with City staff, learn about upcoming project opportunities, and advance contracting equity at the City of Portland. In addition, equity-focused staff at Procurement and the infrastructure bureaus often visit and perform outreach to minority contracting organizations such as [NAMCO](#), [PBDG](#), and [Latino Built](#).

Strategic Program 31: Community Programming, Education, and Encouragement

PROGRAM ADMINISTRATOR: PORTLAND BUREAU OF TRANSPORTATION

FIVE-YEAR FUNDING ALLOCATION: \$15,000,000

DESCRIPTION

Community programs provide vital connection between clean energy transportation investments and the people they serve. PBOT's suite of community programming focuses on educating, encouraging, incentivizing, and rewarding people in choosing low-carbon modes. Equity is integrated within each project strategy, making sure that PCEF priority populations are served first through thoughtful partnerships, geographic selections informed by the PBOT Equity Matrix, and the design of activities and events to meet people where they are.

PCEF funding will address carbon reduction through shifting trips and reducing the use of fossil fuels. Programs and activities encourage biking and walking as an alternative to driving. A citywide reduction in vehicle miles traveled (VMT) also indirectly benefits priority populations by alleviating congestion and shortening commute times.

Key projects within this strategic program are:

- Safe Routes to School, which makes it safe, convenient, and fun for children of all abilities to bicycle, walk, and roll to school and around their neighborhoods through education, road safety improvements, and events.
- Portland Sunday Parkways, which promotes healthy active living through a series of free events opening the city's largest public space - its streets - to walk, bike, roll, and discover active transportation.
- Portland By Cycle, which provides free guided bike rides, skill-building classes and online content, creating a supportive setting for adults new to cycling, new to Portland, or just getting back on the bike.
- Adaptive BIKETOWN, which is Portland's adaptive bike rental program. The program aims to increase access to cycling for people with disabilities.
- General bike messaging, which are seasonal campaigns that encourage people to bike and generate citywide enthusiasm around biking.

OUTCOMES

The overall outcomes of this strategic program are transportation decarbonization through mode shift, increased awareness and education of low-carbon options, and increased enthusiasm and capacity at the community level to integrate transportation decarbonization in their offerings.

Specific project-based outcomes:

- Safe Routes to School (SRTS) serves over 100 schools, engaging over 61,000 students; SRTS is focused on outcomes supporting safety and health, multimodal skill building, and climate resilience. The program prioritizes infrastructure and programming at Title I schools and engagement with students and families of color.
- Sunday Parkways events currently take place in three neighborhoods providing a safe, car-free space for over 50,000 people to walk, bike, and roll. A co-benefit of providing safe public spaces for people to try out biking and rolling is that it initiates or moves people along in their stages of change related to biking or rolling, which then enables them to consider these modes in their everyday trips. 2023 post-surveys report that 30% of participants say they feel much more confident walking and biking after attending, and 32% strongly agree that Sunday Parkways events increase their likelihood of choosing walking or biking.
- Portland By Cycle invites Portlanders across all five districts to try out bicycling by offering introductory bike rides and workshops. These activities are tailored for people who are contemplating bicycling or are new to biking. The program hopes to engage PCEF priority populations through partnerships and geographic locations. Historically, PBOT has partnered with community colleges and community-based organizations to reach people with lower income and people of color.
- Adaptive BIKETOWN aims to increase access to cycling for people with disabilities by offering adaptive bikes to rent. Adaptive bikes are custom-designed bikes that make it easier for people with disabilities or mobility issues to cycle. Along with bike rental, the program offers discounted rates and a variety of social events in partnership with organizations who serve people with disabilities. This program is operated by and located at Kerr Bikes on the Eastbank Esplanade.
- General bike messaging campaigns are a new project that aims to encourage people to bike and generate citywide enthusiasm around biking through a resonant message, simple signs, social events, and digital advertising. Messaging campaigns help promote and normalize biking as a viable transportation option for daily trips, therefore helping shift trips for people who have less barriers to biking or those who already bike regularly.

GOAL MEASURES

Each of the five project areas below has individual goals and measures, with the overall goal of increasing the percentage of use of low or zero-carbon transportation options.

Safe Routes to Schools

- Increase number of elementary and middle schools that have teachers trained in pedestrian, bike, and transportation education by 25% each year.
- 50% of elementary schools teach pedestrian safety education.
- 20% of elementary and middle schools teach bicycle safety education.

Sunday Parkways

- Increase from three events to four events annually.
- Rotate event routes to expand access to events, establishing at least 2 new routes during the funding period, including a Central City event launching in 2025.
- Increase participation of vendors who identify as BIPOC or living with a disability by 25% from 92 in 2023 to 115 in 2025.

Portland by Cycle

- Redesign maps to better highlight routes that are great for people new to biking.
- Distribute 35,000 maps annually in the community.
- Broaden partnerships that form the base of general bike education events, with a goal of 40 events annually.

Adaptive BIKETOWN

- Increase total annual rides from 443 rides in 2023 to 600 annual rides during funding period, equal to an 8% increase year-over-year.

General bike messaging

- Design and implementation of one small-scale general bike messaging campaign in FY 24-25.
- In subsequent years, two small-scale general bike messaging campaigns per year that align with the seasonality of bicycling.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

Sunday Parkways provides approximately \$15,000 annually in vendor scholarships for vendors based on criteria that are aligned with PCEF priority populations. The goal of the scholarships is to help small and emerging business owners to gain experience and grow their customer base. PBOT also anticipates other activities related to workforce development, especially as it relates to jobs in the biking industry and will collaborate with PCEF staff on these approaches.

All positions supported by this funding will be held to existing PBOT and Citywide workforce goals and commitments. The City of Portland is committed to recognizing and removing the systematic barriers to a fair and just distribution of resources, access and opportunity, starting with issues of race and disability. PBOT has committed to racial equity goals and strategies, which include:

- Ending racial disparities within City government, so there is fairness in hiring and promotions, greater opportunities in contracting, and equitable services to all residents.
- Strengthening outreach, public engagement, and access to City services for communities of color and immigrant and refugee communities, and support or change existing services using racial equity best practices.

- Collaborating with communities and institutes to eliminate racial inequity in all areas of government, including education, criminal justice, environmental justice, health, housing, transportation, and economic success.

Strategic Program 32: LED Streetlighting

PROGRAM ADMINISTRATOR: PORTLAND BUREAU OF TRANSPORTATION

FIVE-YEAR FUNDING ALLOCATION: \$37,000,000

DESCRIPTION

PBOT will continue to operate and expand the energy efficiency of streetlighting throughout the city. The City owns and operates about 55,000 streetlights, and about 45,000 of those streetlights are cobra-head fixtures that can be found on most roadways, especially arterials and residential areas. The remaining approximately 10,000 are ornamental streetlights that are located downtown and in other special lighting districts.

All the city's streetlights work to brighten our streets and sidewalks to improve visibility for all travel modes and public safety. LED streetlights consume about 50% less energy than older high pressure sodium (HPS) streetlights. Portland has converted a total of 46,700 streetlights to LED to date, and the City saves about 20 million kilowatt hours of energy every year. Over time, the LED streetlight program has saved about \$1.5 million annually in energy cost savings and maintenance, as LEDs have approximately four times longer lifespan than HPS bulbs. Expansion of this effort will continue to yield savings and community benefits.

The infill of new LEDs streetlights will be in high-crash corridors to help reduce traffic crashes resulting in fatalities and serious injuries. PBOT's equity matrix will be used to help identify locations, with priority areas largely focused on East Portland. PBOT's equity matrix considers the demographic variables of race, ethnicity, and income within census block groups in Portland. New LED lights are also compliant with dark sky standards to help ensure efficient utilization of light and minimize wildlife impacts.

This investment supports the following core project elements:

- Replacement of remaining HPS streetlights and conversion with LEDs.
- Infill of LED streetlights in high-crash corridors as part of the City's Vision Zero goals.
- Annual payments towards the 100% renewable electricity bills associated with operation of streetlights throughout the City.
- Payment towards debt obligations associated with LED conversion of streetlights.

OUTCOMES

- Improved visibility by eliminating dark spots between light poles and providing better light quality, which increases public safety.
- Improved cost effectiveness, energy efficiency, and resulting emissions reduction in operating streetlights.

GOAL MEASURES

- Infill of 1,900 LED streetlights in high-crash corridors.
- Replacement of remaining HPS streetlights with energy efficient LEDs.
- Purchasing of 100% renewable energy for streetlight operations, representing 12,500 MWh of electricity per year.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

Most of the work associated with the LED conversion and infill of streetlights is expected to be performed by PBOT maintenance staff, who are union-represented workers affiliated with Professional & Technical Employees Local 17 union. When contracted work is required, PBOT will use contractors in accordance with their bureau-specific racial equity plan and PCEF requirements. Some core components of the existing plan include that:

- PBOT operationalizes equitable recruitment, hiring, and retention practices to ensure a diverse and inclusive workforce that reflects the communities served and fosters an inclusive work environment for employees of color. Performance evaluations include evaluating racial equity and cultural responsiveness goals and core competencies.
- PBOT meets or exceeds the Citywide contracting goals; provides meaningful access and opportunities to Minority, Women and Emerging Small Businesses; and understands the benefits of Community Benefit Agreements and Project Labor Agreements and how to end racial disparities in contracting.

Strategic Program 33: Mt. Scott Community Center Resiliency Renovation

PROGRAM ADMINISTRATOR: PORTLAND PARKS & RECREATION

FIVE-YEAR FUNDING ALLOCATION: \$6,200,000

DESCRIPTION

PP&R is rehabilitating and expanding Mt. Scott Community Center (MSCC) to better serve current and future generations of Portlanders. This allocation of PCEF funding enables the addition of energy efficiency, resilience, and accessibility measures to this project that will reduce GHGs and help make MSCC a community hub of climate resilience during extreme weather and other catastrophic events. The project is currently on track to attain LEED Gold certification.

Key elements of this project are:

Emissions Reduction Measures

- *Solar generation.* Installation of rooftop solar photovoltaic array tied to the building's electrical system and utilizing a net-metering agreement with the utility.
- *Energy efficiency upgrades.* Above-code insulation, high-efficiency hot water heating, HVAC systems, and appliances, energy star rated windows, electrical upgrades, and low carbon concrete.

Resilience Measures

- *Seismic upgrades.* The project will make seismic upgrades to the gymnasium to increase resilience to this portion of the center that has been opened as a shelter during extreme weather events and could be used in the same manner following seismic events.
- *Natural lighting.* The project will provide extensive windows and skylights with Energy Star rated units that will allow for natural light within the building during power outages, further supporting shelter operations.
- *Battery storage.* Design of a battery backup system tied to the solar array and the electrical system. The system is anticipated to operate HVAC systems in the community room and the gymnasium and support continuity of services during power outages. The design team will also assess the feasibility of supporting emergency lighting with the battery backup system.

Accessibility Measures

- *Basement accessibility.* Installation of elevator and additional basement improvements to make the 9,868 square foot space accessible to ADA standards (currently out of compliance).
- *New construction.* The portion of the building that will be demolished and replaced includes multiple barriers to ADA access noted in the PP&R Transition Plan. The new construction will remove those barriers.

The project is located at 5330 SE 72nd Avenue within the Mt. Scott-Arleta neighborhood. The surrounding community demographics within one-half mile include over 7,000 people with an estimated 28% people of color, 18% youth, and 10% households with low incomes (data from American Community Survey 2016-20, 5-year rolling averages at census block group level). The facility will provide shelter to community members in emergency situations and provide ongoing access to recreation space and community programming.

OUTCOMES

- Reduced GHGs through renewable energy generation and energy efficiency.
- Tracking of electricity, gas and water use through Facility Information Monitoring systems to measure energy use.
- Enhancement of MSCC's capacity to provide shelter during extreme weather-related events.
- Facility users living with mobility challenges can access all publicly available areas of the building.
- Increase the number of days the facility can operate during power outages when shelter space is needed.
- Demonstration of a climate resilient approach to construction with anticipated LEED gold certification.

GOAL MEASURES

- Solar array to be installed with approximately 130kW generation capacity.
- Completion of battery backup system design and electrical load evaluation.
- Estimated annual savings of approximately 124,000 kWh annually from previous baseline modeling for energy efficiency measures.
- Increase severe weather shelter capacity through the addition of new community room space (2,845 square feet, occupancy load 407).

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

PP&R is committed to utilizing diverse contractors and promoting workforce equity in all its projects. To support this commitment, PP&R builds relationships building by attending local trade, chamber, and business association meetings to provide information about upcoming projects.

Prior to bid advertisement for the MSCC project, PP&R staff collaborated with Procurement Services' Inclusive Contracting team to raise awareness of and interest in the project for COBID certified firms. Staff made presentations to contracting, professional, and community organizations that support COBID firms including:

- National Association of Minority Contractors, Oregon.
- Latino Built.

- Metropolitan Alliance for Workforce Equity.
- Professional Business Development Group.

Outreach materials for these events were provided in English and in Spanish. Staff also hosted an on-site meet and greet to introduce COBID firms to each other and to non-certified prime contractors.

PP&R utilizes the City of Portland's Social Equity Contracting Strategy which promotes economic growth and encourages partnering and mentoring between large and small COBID certified firms on City contracts. The City has established an overall aspirational goal of 20% in awarding subcontracts to COBID certified firms. Proposing firms are encouraged to use the State's Certification Office for Business Inclusion and Diversity website for identifying potential subconsultants. All proposers are required to provide COBID certification status, a commitment to utilizing COBID certified subs, and descriptions of workforce and workplace equity practices.

MSCC is bid via a low bid process following the City of Portland's Workforce Training and Hiring Program. The program applies to this project's Prime Contractor and all sub-contractors with a contract value at or above \$100,000. This program includes the following components:

- Contractors be registered as Training Agents with the Bureau of Labor and Industries (BOLI).
- 20% of trade hours must be worked by state registered apprentices.
- The City has goals of 18% minority participation and 9% female participation. Contractors can achieve these goals using journey or apprentice level workers.
- Prime contractor must submit a Workforce Plan, and any subcontractors must comply 14 days before starting work.

Strategic Program 34: Tree Protection, Care and Workforce Development

PROGRAM ADMINISTRATOR: PORTLAND PARKS & RECREATION

FIVE-YEAR FUNDING ALLOCATION: \$100,840,000

DESCRIPTION

Portland's urban forest plays a critical role in public health, responding to the climate crisis, and providing services to Portland residents. Maintaining and increasing tree canopy is instrumental in achieving PCEF's goals of reducing and sequestering GHGs and provides opportunities to build a diverse and well-trained work force and contractor pool. This allocation to PP&R Urban Forestry programs will continue to improve the preservation and care of trees across the city.

Within the strategic program, these program deliverables will include the following core elements:

Street Tree Maintenance Program Launch

Portland's current street tree maintenance policy places significant financial burden on property owners, discourages street tree planting, and results in a poorly maintained and inequitably distributed street tree system. The vast majority of street tree care is initiated by property owners and conducted under permits issued by PP&R Urban Forestry. This leads to disparate and inequitable tree canopy and forest health outcomes across the city. This strategic program allocates approximately \$65 million of initial funding for the City to build the systems, procedures, and contracts needed to proactively maintain Portland's estimated 240,000 street trees. The program will seek to place every street tree into a five to 10-year management cycle of inspection, structural pruning, hazard abatement, removal, and replacement and includes workforce development components.

A comprehensive maintenance program will improve tree health and longevity, enable the planting of tens of thousands of new street trees additional to the existing commitments in the PCEF Equitable Tree Canopy Program, and will over time replace the estimated 76,000 trees undersized for their location with larger form trees which provide significantly greater benefits to the community.

Citywide Tree Preservation and Care

The vast majority of Portland's tree canopy is situated on private property. Portland utilizes an education and regulatory model to encourage the ongoing preservation, care, removal, and replacement of the millions of trees on private property. Urban Forestry also cares for and maintains trees on public property in parks and city spaces. This strategic allocation includes \$35 million of general funding offset to continue the existing services and maintain capacity of these established programs that:

- Enhance tree preservation and forest management through tree regulation, inspection, and permitting.

- Reduce the cost of proper tree management for thousands of households each year by reducing or eliminating tree permit application and inspection fees and funding certain private property tree care.
- Ensure City projects maximize tree preservation and support goals and visions of adopted plans and policies.
- Provide necessary customer service, communication, and education capacity to foster long-term community care for the urban forest.
- Care for trees around the city in parks and other public spaces through deployment of City Arborists.

Arborist Trainee Program

PP&R's Arborist Trainee program is modeled from the existing program utilized in PP&R's Professional Repair and Maintenance Services work group to create a pathway for diverse candidates to find employment and career opportunities in the arboricultural industry. The program leverages existing relationships with community organizations that have expressed strong interest in partnering with PP&R on apprenticeship programs.

OUTCOMES

The outcomes of this strategic program will lead to Citywide improvements in maintenance and expansion of tree canopy. The city's 240,000 street trees will be put on a path to receive proactive care on a five- to ten-year maintenance cycle. The program will:

- Improve form, health, and longevity of the City's street tree assets.
- Eliminate the cost burden for adjacent property owners.
- Improve street safety by clearing limbs blocking traffic control signs and signals, reduce conflicts with vehicles, increase space for streetlights, increase visibility of pedestrians, and other improvements.
- Significantly expand street tree planting opportunities by removing maintenance cost burden.
- Reduce frequency of emergency tree failures, improving citywide response in storm situations and reducing risk to life and property.
- Improve the livability and desirability of the city through community beautification, connection and walkability.

In addition to the street tree maintenance program, PCEF funds will also support the following outcomes:

- Continue providing maintenance of trees on public properties and the inspection, permitting and care of trees throughout the city.
- Reduce cost burden of private tree maintenance through financial support to private property owners.

- Promote stewardship of private property trees by reducing or eliminating certain permit fees.
- Provide necessary customer service, communication and education capacity to foster long-term community care for the urban forest.
- Provide more accessible avenues to careers in tree care for diverse applicants, increasing the representation of women and people of color in the City’s arborist profession.
- Support individuals without prior experience in the field to develop employable skillsets and ultimately progress further in their careers.
- Develop career opportunities to progress through the arboriculture field.

GOAL MEASURES

The systems and processes to fill the need for street tree care citywide will take some time to build. This strategic program includes the following goals:

- Complete street tree maintenance pilot project and establish initial maintenance cycle as allowable with current funding.
- Maintain existing tree permitting and regulation service levels including customer support, permit inspection and issuance, and supporting tree preservation and planting in City capital projects.
- Maintain existing proactive park tree maintenance, park tree planting and establishment, and citywide tree emergency response service levels.
- Develop an arborist trainee program and establish initial cohort of three trainees.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

For the development of the Street Tree Maintenance Program, Urban Forestry will utilize contracted tree care providers for pruning, removal, planting, and establishment work. The Urban Forestry staffing for various elements of this strategic program will include contractor management, tree inspection, procurement, communications, GIS, and technology capacity in addition to necessary managerial and supervisory staff.

Full lifecycle care of mature trees involves multiple activities requiring varying levels of skill, knowledge, and experience. Many of these activities provide opportunities for entry level workers and training to move into higher skilled careers, as well as small contractors to participate in providing services. These opportunities envisioned for this strategic program include, but are not limited to:

- RFPs for tree care providers will be drafted to prioritize the selection of diverse contractors with effective trainee and workforce development programs.
- Utilizing smaller contractors for tree removal, stump grinding, tree planting, and establishment.
- Developing trainee programs for additional City roles such as Tree Inspectors. These roles provide excellent career opportunities with competitive salaries and benefits. They also provide

pathways for skilled arborists to move into less physically demanding and rigorous roles later in their careers.

Care and maintenance of large, mature trees requires a high degree of skill and experience. Tree care is amongst the most dangerous professions in the country. Arborists routinely work within proximity of high voltage wires, operate complex heavy machinery, and perform tree maintenance while suspended from climbing gear dozens of feet off the ground. While pursuing opportunities to expand pathways into the professional arboriculture field through this program, Urban Forestry will also maintain rigorous qualification standards to ensure worker safety.

Strategic Program 35: Transition to Electric Landscaping Equipment

PROGRAM ADMINISTRATOR: PORTLAND PARKS & RECREATION

FIVE-YEAR FUNDING ALLOCATION: \$1,600,000

DESCRIPTION

In March 2024, Portland City Council voted to amend City Code Chapter 8: Health and Sanitation to prohibit the use of gas-powered handheld and backpack leaf blowers on public and private property within Portland city limits. This prohibition begins with an initial phase out beginning January 1, 2026, and a full ban in place effective January 1, 2028.

Through this strategic program, PP&R will phase out gas-powered handheld and backpack leaf blowers used in PP&R operations and replace them with electric battery powered versions. In addition, PP&R will pursue a broader goal of transitioning gas-powered landscaping equipment to electric alternatives. This equipment will support the bureau's commitment to work towards sustainability, achieve goals in decarbonizing City operations, and comply with the legislation.

Currently, PP&R operates over 150 gas-powered backpack leaf blowers. The engines used by these leaf blowers can emit significant amounts of air pollution including nitrous oxides, carbon monoxides, and hydrocarbons. Studies have shown that running a gas-powered leaf blower for just one hour can emit as much pollution as driving a standard sedan for 1,100 miles. Replacing the gas-powered leaf blowers that are currently in use will significantly decarbonize PP&R's operations and reduce potential human health impacts. During the implementation of this strategic program, PP&R will be able to track the utilization of the new electric powered leaf blowers in the fleet.

As part of the transition to electrifying City landscaping equipment, funding from PCEF will also be used to assess and upgrade the capacity of electrical infrastructure at PP&R sites where landscaping equipment is stored and charged. These assessments and potential upgrades will support further replacement of gas-powered landscaping equipment with electric alternatives.

OUTCOMES

- Reduced pollution and potential health impacts for people directly using the equipment on a frequent basis.
- Reduced carbon emissions associated with burning fossil fuels to operate landscaping equipment.
- Some reduced noise pollution from the operation of equipment in parks and public spaces.
- Demonstration of the operational benefits and ease of integration of electric leaf blowers and potentially other electric landscaping equipment, serving as a model adoption for businesses and the community.

- Better prepared electrical infrastructure for future electrification of PP&R facilities and operations.
- Acquisition of additional electric powered landscaping equipment and electrical upgrades, depending on the findings of infrastructure needs assessments and budget constraints.

GOAL MEASURES

- Acquisition of at least 160 electric backpack leaf blowers, along with the batteries and chargers that are needed for operation.
- Electrical upgrades for at least three facilities that are required for charging and any future needs for electrifying equipment.
- Completed assessment of the electrical infrastructure needs required at 15 PP&R facilities to support further electrification of leaf blowers and other landscaping equipment.

PROGRAM-SPECIFIC WORKFORCE AND CONTRACTOR EQUITY CONSIDERATIONS

The work required for electrical system upgrades for charging at the City maintenance facilities will be performed by City employees and will not require contracted funds.

Table 2: Summary of additional updates to the CIP

Updates with funding increases			
Strategic program name	Description of change	Five-year increase to 2023 CIP funding allocations	Climate Emergency Work Plan* actions that are directly or indirectly supported by the CIP
Community grants	Increasing funds in response to significant community demand demonstrated in 2023 Community Grants solicitation	\$120,000,000	All CEW actions
Collaborating for Climate Action	Allocation funds for new funding opportunity. Originally planned for \$158M, but since increased to \$300M in response to significant demonstrated demand.	\$300,000,000	Multiple CEW actions
SP 22: Green Stormwater Infrastructure and Watershed Health	Add CAL adjustment for inflationary factors	\$5,429,822	F-1, F-2, F-3, F-5, NR-1, NR-2, NR-3, NR-4, IP-1
SP 32: LED Streetlighting	Add CAL adjustment for inflationary factors	\$2,287,605	B-2, T-1, T-4

SP 34: Tree Protection, Care and Workforce Development	Add CAL adjustment for inflationary factors	\$4,585,901	B-3, T-1**, T-2**, T-3**, NR-2, NR-3, NR-4, W-1, IP-1
SP 37: Cooling Portland	Increase in funds to expand program in respond to strong performance and need	\$10,300,000	H-1
Inflation contingency	Add inflation contingency allocations for 2024 City Climate Projects	\$12,000,000	Multiple CEW actions
Total additional funding allocation increase:		\$454,603,328	
Updates without funding increases			
Strategic program name / change	Description of change	Climate Emergency Work Plan* actions that are directly or indirectly supported by the CIP	
SP 16: Climate Friendly Public Schools	Correction to specific school allocations due to tabulation error in original 2023 CIP.	E-2, T-1*, T-2**, T-3**, T-7, NR-4, H-1, IP-1, E-4	
Adjust CIP end date to 6/30/29	NA	NA	
Tree Canopy Maintenance Reserve	Revise to focus on private property trees instead of public right of way trees.	T-3**, NR-4	
SP: 36 Tree Canopy Maintenance Reserve program	Adjust naming to conform with other strategic programs, labeled as SP 36.	T-3**, NR-4	

Community Grants allocation increase

At the core of PCEF's mission is its Community Grants program (formerly referred to as Community Responsive Grants), a funding opportunity for projects designed and implemented by community-based nonprofit organizations. These grants prioritize carbon emissions reduction and climate workforce training projects that are led by, and serve, communities living on the frontlines of climate change.

This amendment allocates an additional \$120 million to the Community Grants program, responding to high demand observed during the 2023 grant cycle. The increased funding will enable proportional expansion of project outcomes and goals, amplifying PCEF's ability to drive equitable climate action and workforce development.

Collaborating for Climate Action allocation

In March 2024, the PCEF Committee approved an initial allocation of at least \$158 million for the Collaborating for Climate Action funding opportunity. This competitive grant program is designed to support high-impact, multi-stakeholder projects that deliver equitable climate action solutions over five

years. In response to overwhelming interest and demand, the PCEF Committee approved an additional \$142 million for the funding opportunity in November 2024, bringing the total allocation to \$300 million. Recommendations for project funding are scheduled to be presented to City Council in late December 2024.

Inflationary contingency and adjustments to allocations for SP22, SP32, and SP34

Following the adoption of the FY24-25 budget, City Council directed the City Budget Office and BPS to develop a methodology for addressing inflationary factors for bureau projects backed by PCEF resources that were previously funded with other ongoing City resources, including the following annual allocations:

- \$7 million of General Fund ongoing that supported the Urban Forestry program in PP&R.
- \$7.4 million of General Fund ongoing that supported LED streetlights in PBOT.
- \$14.3 million of sewer rate revenue in the BES for watershed and natural areas management.

This amendment applies Current Appropriation Level (CAL) methodologies for inflationary adjustments, based on guidance from the City Budget Office to the following strategic programs: SP22: Green Stormwater Infrastructure and Watershed Health, SP32: LED Streetlighting, and SP34: Tree Protection, Care and Workforce Development. Budget increases for inflationary adjustments will be provided by the City Budget Office annually.

Additionally, the amendment establishes a \$12 million inflation contingency fund to support any of the 2024 City Climate Projects. Allocation from this fund will require mutual agreement between the City Budget Office and BPS during the annual budget development process. Starting FY26-27, projects experiencing inflationary cost pressures may request additional funds upon demonstrating that project costs are likely to exceed their allocated budgets, based on prior performance, reporting, and expenditures.

Expansion of the Cooling Portland Program, Strategic Program 37

Prior to the development of the CIP, PCEF launched the Cooling Portland program (initially named the Heat Response Program) in response to the June 2021 extreme heat event in which over 70 people in Multnomah County lost their lives. Cooling Portland is a climate-resilience program that provides efficient portable cooling units to low-income, vulnerable Portlanders. Local organization Earth Advantage was selected by the PCEF committee and approved by City Council to serve as Equipment Purchasing Partner. Earth Advantage is tasked with identifying high-efficiency heat pump and air conditioning units, purchasing and warehousing those units, and effectively distributing them to community distribution partners (CDPs). CDPs are community-based organizations and housing providers that are responsible for identifying and prioritizing recipients, scheduling delivery, installing cooling units, and providing educational materials.

The program had an initial goal of 15,000 units installed over five years. It is delivering results ahead of schedule, reaching 13,000 units installed in three years. There is significantly more community demand than there is current budget, with approximately 6,000 low-income Portlanders on wait lists for cooling units through an active intake partnership with PDX 311. PCEF staff and Earth Advantage project that a new goal of 25,000 total units would meet current demand and allow the program to continue operations for the full five years through 2026. With this amendment, Cooling Portland is incorporated into the CIP as Strategic Program 37, in alignment with PCEF code, and an additional \$10.3 million is allocated to meet the expanded installation goal.

Correction to Strategic Program 16: Climate-Friendly Public Schools

A tabulation error was identified in Table 11 of the CIP (CIP page 73) relating to the number of schools eligible for allocations for student-led initiatives. Middle and high schools within the City of Portland are each eligible for an allocation of up to \$75,000 (\$15,000 annually) over five years. The allocation table below (Amended Table 11) indicates the corrected allocations. The total funding amount for this strategic program is unchanged.

Amended Table 11. Climate-Friendly Public Schools allocation.

School district	Qualifying schools	Allocation for physical improvements (\$)	Middle and high schools in city (#)	Allocation for student-led initiatives (\$)*
Centennial	4	\$4,617,500	1	\$75,000
David Douglas	12	\$11,736,146	4	\$300,000
Multnomah ESD	4	\$3,270,729	2	\$150,000
Parkrose	6	\$5,579,479	2	\$150,000
Portland Public Schools	31	\$16,930,833	40	\$3,000,000
Reynolds	3	\$4,040,313	0	\$150,000 0

Riverdale	0	\$0	2	\$75,000 150,000
TOTAL	60	\$46,175,000	51	\$3,825,000

***If the number of eligible schools for student led initiatives is lower than expected, unallocated funds may be added to physical improvement allocations for the district.**

CIP end date adjustment

The 2023 CIP was initially set to conclude on October 31, 2028. To align with the fiscal year calendar, this amendment extends the CIP end date to June 30, 2029.

Tree Canopy Maintenance Reserve Update, Strategic Program 36

The Tree Canopy Maintenance Reserve program is updated to focus on private property trees using the underlying needs-based framework in the original CIP, prioritizing lower income homeowners. The shift in focus on private property trees is driven by PP&R's new strategic programs focused on citywide street tree maintenance (SP 34). Additionally, this program will be labeled "Strategic Program 36: Tree Canopy Maintenance Reserve" to align with naming conventions associated with other strategic programs.

Acknowledgements

We appreciate the diverse individuals and groups, many of whom are named below, who have contributed their insights and collaborative spirit to the Climate Investment Plan public process and strengthening the delivery of equitable benefits. Many community members, workshop attendees, roundtable participants, community review panel participants, consultants, Committee members, and City staff have played a pivotal role in shaping the plan and are a testament to the strength of community solutions. We also extend our gratitude to the unnamed contributors who, though not listed below, laid the groundwork for the program's existence and progress.

To everyone involved, we extend our heartfelt appreciation.

Roundtable community participants

82nd Avenue

- Alicia Axt, student at McDaniel Highschool
- Amandeep Sohi, Verde
- Dasha Foerster, Green Lents
- Jacob Loeb, Montavilla/East Tabor Business Association + 82nd Avenue Business Association + Montavilla Neighborhood Association
- Jaxon Dryden, student at McDaniel High School
- Katherine Rose, Depave
- Kristin Mueller, Meals on Wheels People/Loaves & Fishes Centers
- Zachary Lauritzen, Oregon Walks + 82nd Avenue Coalition

Access to Fair and Flexible Capital

- Alan Hipolito, suma
- David Heslam, Earth Advantage
- Desiree Sideroff, Craft3
- Jason Hilton, Micro Enterprise Services of Oregon (MESO)
- Jo Brickman, VertueLab
- Robin Wang, PCEF Committee
- Stephen Green, Oregon Growth Board + Better Business PDX
- Theresa Deibele, Occam Advisors
- Tim Miller, PECL + Oregon Business for Climate
- Tomas Endicott, Bonneville Environmental Foundation

Building Upgrades for Community Severe Weather Response

- Aaron Presberg, Portland Public Schools
- Alena Guggemos, Quadriplegics United Against Dependency Inc. (QUAD)
- Dan Trifone, Multnomah County Health Department
- Desiree Eden Ocampo, Rahab's Sisters
- Gayle Palmer, East Portland Resilience Coalition and Centennial Community Association
- Jeni Hall, Energy Trust of Oregon
- Kat Davis, Portland Public Schools
- Kianna Juda-Angelo, Living Islands
- Liam Castles
- Robyn Faraone, Portland Public Schools
- Sabrina Wilson, The Rosewood Initiative
- West Livaudais, Oregon Spinal Cord Injury Connection

Clean energy in regulated multifamily affordable housing

- Alex Novie, Energy Trust of Oregon
- Allen Hines, Community Vision
- Bill Van Vliet, NOAH
- Brent Lee, Native American Youth and Family Center
- Heather Hollingsworth, Central City Concern
- Jeff Lane, Home Forward
- Mark Lyles, New Building Institute
- Sean Denniston, New Buildings Institute
- Stacie Sanders, Housing Oregon
- Stefanie Kondor, Related NW
- Timothy Clark, Oregon Housing and Community Services

Clean energy in unregulated multifamily housing

- Alex Novie, Energy Trust of Oregon
- Bill Van Vliet, NOAH
- Faith Graham, Elevate + PCEF Committee
- Hal Nelson, Portland State University
- Huda Yusuf, Ethiopian and Eritrean Cultural and Resource Center (EECRC)
- Jennie Cirincione, Native American Youth and Family Center
- Mekha Abraham, TRC
- Nikita Daryanani, Coalition of Communities of Color
- Nuhamin Eiden, Unite Oregon
- Sean Denniston, New Buildings Institute

Clean energy improvements in single-family homes

- Anthony Roy, Earth Advantage
- Berenice Lopez, LatinoBuilt
- Charity Fain, Community Energy Project
- James Metoyer, EnerCity Collaborative + Advanced Energy Inspections + Home Performance Guild + PCEF High Roads Advisory Council
- Jason Benfit, Neil Kelly
- Linh Doan, APANO Communities United Fund
- Marshall Johnson, Energy Trust of Oregon
- Suzanne Washington, Meals on Wheels People

Clean energy in small commercial buildings

- Guillermo Castillo, Small Business Utility Advocates
- Hannah Rusnac, Holst
- Jason Benfit, Neil Kelly
- John Wasiutynski, Multnomah County Office of Sustainability
- Kristi DeGroat, Oregon Solar + Storage Industries Association (OSSIA)
- Leanna Petrone, Portland Business Development Group
- Michelle Maher, Oregon Solar + Storage Industries Association (OSSIA)
- Sean Denniston, New Buildings Institute
- Stephanie Basalyga, Micro Enterprise Services of Oregon (MESO)
- Wendy Gibson, Energy Trust of Oregon

Equitable Tree Canopy

- Ali Berman, Portland Audubon
- Art Meisner, Cascadian Landscaping
- Derron Coles, The Blueprint Foundation + Connecting Canopies
- Jeremy Hart, APANO
- JT Yu, SymbiOp Landscaping
- Megan Horst, PCEF Committee
- Noelle Studer-Spevak, Families for Climate
- Teresa Gaddy, Ecotrust + Green Workforce Collaborative & Academy
- Yashar Vasef, Friends of Trees

Organizational Capacity Building

- Alyshia Alohalani Macaysa-Feracota, Oregon Pacific Islander Coalition
- Ana Meza, ROSE Community Development + East Portland Resilience Coalition

- Arika Bridgeman-Bunyoli, Portland Children's Levy
- Candace Avalos, Verde
- Derric Thompson, Leaders Become Legends
- Lluvia Merello, Portland Indigenous Marketplace
- Nanci Champlin, Southeast Uplift Neighborhood Coalition
- Yonas Kassie, Ethiopian and Eritrean Cultural Resource Center

Regenerative Agriculture Stakeholder Meetings

- Adam Kohl, Outgrowing Hunger
- AJ McCreary, Equitable Giving Circle
- Dee Thompson, Oregon Food Bank
- Deidre Schuetz, Nutrition Garden Rx
- Gabe Sheoships, Friends of Tryon Creek
- Heather Keisler Fornes, Portland Fruit Tree Project
- Jason Skipton, Growing Gardens
- JT Yu, SymbiOp
- Kendra Graves, small farmer
- Leialoha Ka'ula, KALO Hawaiian Civic Club
- Letty Martinez, Flying Dogheart Farm
- Megan Horst, PSU School of Urban Studies & Planning + PCEF Committee
- Renea Perry, Portland All Nations Canoe Family
- Robert Cato, Zenger Farms
- Sabrina Cerquera, Ecotrust
- Serina Fasthorse, Kimímela Consulting
- Shiny, Come Thru Market
- Surabhi Mahajan, Zenger Farms

Climate-friendly Public Schools

- Paul Southerton, Centennial School District
- Patt Komar, David Douglas School District
- Colleen Hathaway, David Douglas School District
- Sharie Lewis, Parkrose School District
- Robyn Stolin, Parkrose School District
- Tullan Spitz, Portland Public Schools
- Kat Davis, Portland Public Schools
- John Dixon, Reynolds School District

Transportation Decarbonization

- Aaron Brown, Portland Neighbors Welcome + No More Freeways + Oregon Transportation Futures Project
- Adah Crandall, Sunrise Movement + Portland Youth Climate Strike + student at Grant High School
- Alexa Diaz, Forth
- Ariadna Falcon Gonzalez, The Getting There Together Coalition (GTT)
- Gary Hollands, Interstate Trucking Academy
- Hau Hagedorn, Portland State University
- Jan Campbell
- Lee Helfend, OPAL/Bus Riders Unite!
- Lenny Dee, Onward Oregon
- Maria Sipin, PCEF Committee
- Phil Berger
- Steph Routh, Community Cycling Center
- Victoria (Vee) Paykar, Climate Solutions

Community Review Panel Members

Frontline Panel

- Alan Hipolito, suma
- April Nyquist, East Portland resident
- Dawn Lowe, Wisdom of the Elders
- Etawi O'Byrne, UPRISE Collective
- Indigo (Indi) Namkoong, Verde
- Jacinta Galeai, Samoa Development Corporation
- Jardima Kroeker, Oregon Expungement Relief Project
- KeeLee Cavil, Student at Parkrose High School
- Kendra Graves, Farmer + Black & Beyond the Binary Collective
- Saara Hirsi, Immigrant and Refugee Disability Group
- Shannon Olive, Rebuild WomenFirst
- Taren Evans, Coalition of Communities of Color
- Tina Semko, Contractor + East Portland resident

Youth Panel

- Adah Crandall, Sunrise Movement + Portland Youth Climate Strike + Student at Grant High School
- Adoniah Simon, Student at Andrews University
- Annie Duan, Youth Environmental Justice Alliance
- Aquene Briggs, Student

- Liam Castles, Sunrise Movement + Portland Youth Climate Strike
- Natan Hagdu, Student
- Salomé Flores, Youth Environmental Justice Alliance
- Sean-Hobbs Waters, Student at Mt. Hood Community College
- Zoe Serrano, Student at Lewis and Clark Law School

PCEF Committee Members

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- Maria Sipin
- Ranfis Villatoro
- Robin Wang
- Megan Horst
- Faith Graham
- Paul Lumley
- Alicia Chapman
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PCEF High Roads Advisory Council

- Adrian Arenas, LatinoBuilt
- Amber Faist, Northwest Native Chamber
- James Metoyer, Advanced Energy Inspections and EnerCity Collaborative
- Jeremy Hays, Upright Consulting
- Jim Plantico, Community Energy Project
- Lynn Lindgren-Schreuder, Housing Development Center
- Rana Uzzaman, Portland YouthBuilders
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About City of Portland Bureau of Planning and Sustainability

The Bureau of Planning and Sustainability (BPS) develops creative and practical solutions to enhance Portland's livability, preserve distinctive places, and plan for a resilient future.



THE BUREAU OF **PLANNING
& SUSTAINABILITY**

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