



THE BUREAU OF  
**PLANNING &  
SUSTAINABILITY**

# Memo

**To:** City Council offices, City Administrator, Deputy City Administrators, Bureau Directors  
**From:** Vivian Satterfield  
**Cc:** BPS Climate Team  
**Date:** September 18, 2024  
**Re:** Climate Emergency Workplan, Year Two Progress Report (FY 23-24)

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On behalf of BPS, I am pleased to present this annual update on implementation of the Climate Emergency Workplan, the City's adopted climate action plan through 2025. BPS submits this update on behalf of all the City bureaus that contribute to reducing carbon emissions while also preparing to make City infrastructure and operations more resilient and adaptive in consideration of a changing climate. (For a complete list of contributors, please see Acknowledgements at the end of this memo.)

This period of transition for the City gives us the opportunity to be clear-eyed about the past to shape the future. The Climate Emergency Workplan second-year progress report gives us an honest assessment of the challenges in implementing these 47 strategies and actions. Our carbon emissions inventory shows that we are not on track to meet our 2030 and 2050 goals.

The longer we delay action, we only exacerbate the risks and costs associated with climate change. More severe, more frequent, and more disruptive climate-related events are already our norm. Investing in climate today by directing staff and providing resources to address delayed projects is critical in this last year of the CEW.

With my role positioned in the City Administrator's office going forward, I am eager to continue coordination with climate practitioners across service areas. We have incoming support: with the Council's approval of creation of the Sustainability and Climate Commission, a new governance body made of Portlanders will champion climate action in the City and in partnership with us, will create the next climate action plan for the City. In addition, the City Auditor's office is currently scoping a climate justice performance audit, the findings from which will assuredly further inform the work ahead of us.

Despite the very real impacts of a warming planet on our community, I feel hopeful that we have the best science available and learned strategies from across the globe to change the trajectory of climate change and build equitable and climate resilient communities. Let this year's Climate Emergency Workplan progress report be a reminder that we have no time to waste. We must not hesitate to initiate the serious changes required to secure a livable future for current and future generations.

In Partnership,

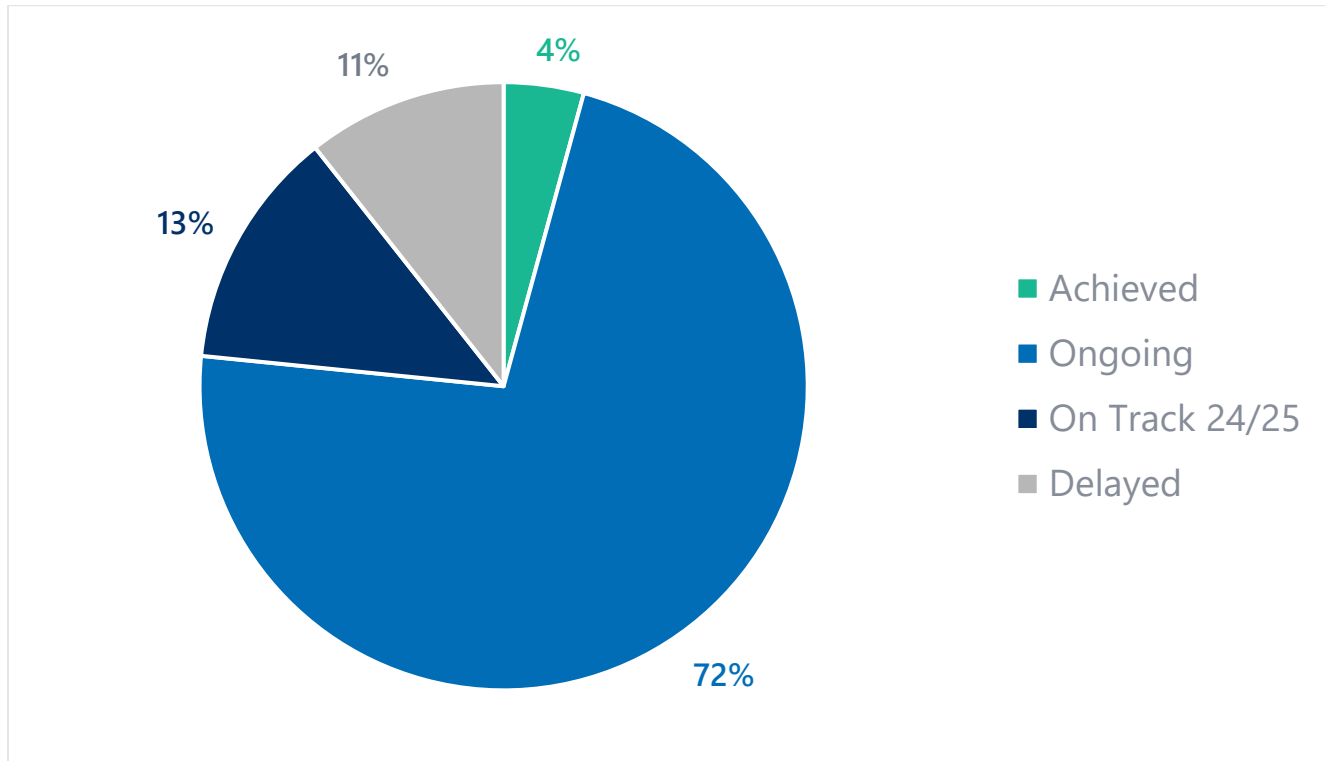
Vivian Satterfield, Chief Sustainability Officer



## Progress at-a-glance

The Climate Emergency Workplan, a collaboration with 10 City bureaus, contains 47 priority actions designed to reduce local carbon emissions and to make Portlanders more resilient, specifically communities of color and those most vulnerable to the impacts of climate change.

This memo covers the second year of a three-year plan. Most actions (72%) are ongoing and moving forward, so they will continue beyond the duration of this plan. At least (13%) are on track to be complete by the end of the next fiscal year. No additional actions were achieved this year, leaving the total achieved at two. However, a few more actions were delayed this year. Detailed updates for all 47 actions can be found in the Appendix that follows this memo.



Over the past year, the City of Portland notably advanced the priorities of the Climate Emergency Workplan:

- Invested \$600 million into City projects and \$700 million in community-wide projects over five years from the Portland Clean Energy Fund.
- Led the way on industrial decarbonization.
- Acquired approximately \$7 million in external grant funds; and
- Made the most of one-time general fund investments.

## Carbon emissions inventory update

The City of Portland has been tracking local carbon emissions for nearly 30 years. Detailed data about carbon emissions and energy trends can be found on the BPS Climate and Energy dashboard. The



following summary outlines progress made on emission reduction goals. The most current inventory year and data available is for 2022.

- 1) Multnomah County emitted almost 7.3 million metric tons of greenhouse gases in 2022. This is a 2% increase over 2021 emissions. While this might seem like a small percent increase, the reality is that we need to be reducing emissions by a much greater amount year over year to hit 2030 and 2050 reduction targets. An increase, even a seemingly small one, means we are going in the wrong direction.
- 2) Total emissions are 21% below 1990 levels. Multnomah County continues to benefit from significant per-person emission reductions of 43% below 1990 levels.
- 3) Emissions increases came from the residential and commercial building sectors, due to a 10% increase in natural gas sales and 9% increase in electricity sales, resulting from colder winter temperatures and a hotter summer from July to September.
- 4) However, these increases were tempered by significantly reduced transportation sector emissions, dropping lower than 2020 levels, and 7% below 1990 levels. These reductions resulted from a significant increase (3.4%) in renewable diesel replacing fossil diesel fuel and higher average gasoline and diesel prices. According to AAA, Oregon saw record average prices in summer 2022, with an unleaded gasoline record occurring on June 15 and a diesel fuel record on July 22. Historically, transportation sector emissions have been the slowest to decline. The data indicates that fuel prices have a significant impact on driving practices and will be key to continuing to reduce transportation sector emissions in the coming years.
- 5) Portland and Multnomah County use an annual sector-based emissions inventory. Local, state, and national governments use this inventory widely, and it meets the Global Protocol for Community-scale Greenhouse Gas Emission Inventories.

## Investing in climate action and community benefits

The Portland Clean Energy Community Benefits Fund (PCEF) is a significant part of how Portland is fighting climate change. PCEF investments can be found in many of the updates contained in the Climate Emergency Workplan progress report (look for the **PCEF** in the appendix).

Through late 2023 and early 2024, PCEF helped advance the CEW through three primary actions:

- 1) City Council unanimously adopted the inaugural \$750 million Climate Investment Plan (CIP) in September 2023.
- 2) PCEF collaborated with City bureaus to identify and allocate over \$380 million in additional funding to City-led climate projects leveraging additional unanticipated revenues (i.e., in excess of revenues projected within the adopted CIP); and
- 3) PCEF launched the Collaborating for Climate Action funding opportunity to fund high-impact, multi-stakeholder projects that create equitable climate action solutions over the next five years.



A few examples of climate investments through these actions include: the electrification of the City vehicle fleet, over \$300 million for residential, multifamily, and commercial building decarbonization, scaling up active transportation programs, strengthening an equitable tree canopy to combat extreme heat, and improved HVAC and other efficiency upgrades at our well-loved community centers.

## Trailblazing industrial decarbonization

Since publishing the Portland Clean Industry Study in June 2023, BPS has made significant progress moving this work forward. Most importantly, partnerships between BPS, the industrial sector, and other key partners have advanced in important ways. These partnerships include forming a coordinating team with Prosper Portland and PSU Institute for Sustainable Solutions, establishing a Clean Industry Hub Advisory Group through the Portland Metro Chamber, and participation in the International Industrial Symbiosis Alliance.

In January 2024, BPS and Portland State University (PSU) announced a two-year partnership to implement recommendations from the Clean Industry Study, with an emphasis on providing technical assistance to industrial businesses applying for federal funding. Under this partnership, BPS and PSU submitted four proposals for federal and local funding.

As proof that these relationships can achieve real outcomes, this year the U.S. Department of Energy awarded BPS and its partners a Community Energy Innovation Prize to launch an inclusive industrial symbiosis ecosystem in Portland. The prize brought in \$200,000 so far, with the chance to win a grand prize in December 2024. BPS was part of a coalition that included PSU, Prosper Portland, Columbia Corridor Association, WorkSystems, Energy 350, Oregon State University, and Center for Sustainable Infrastructure. Through the prize, the coalition hosted multiple convenings with industrial businesses and public agencies, hosted workshops with community-based organizations and workforce development agencies, conducted technical assessments to identify industrial symbiosis projects, and will share best practices to a wider audience.

BPS also hosted visitors from Denmark, Brazil, and Washington State to share learnings on industrial symbiosis and train professionals in industrial policy and technical assessments. Participating in this knowledge exchange has helped place Portland at the forefront of the global transition to clean industry. [Action I-1: Develop strategies for the industrial sector to reduce emissions, pollution, and waste, and follow inclusive practices.]

## Successfully seeking sources of outside funding

City bureaus have been increasing their grant seeking capacity. Bureaus that have sought grants include Portland Bureau of Transportation (PBOT), Bureau of Environmental Services (BES), Bureau of Planning and Sustainability (BPS), Bureau of Fleet and Facilities (BFF) City Fleet, Portland Water Bureau (PWB), Portland Permitting & Development (PP&D), Portland Bureau of Emergency Management (PBEM), Portland Fire & Rescue (PF&R), and Portland Parks & Recreation (PP&R). In total, the City acquired approximately \$7 million in grant funding, mostly from the federal government.



## Advancing electric vehicle infrastructure

The U.S. Department of Energy awarded PBOT a \$3.5 million grant to conduct robust community engagement and education, install up to 50 EV chargers in historically underserved communities, and write a toolkit on curbside charging to share best practices with other municipalities. PBOT is also exploring other code and administrative rule changes that would expand Level 2 charging and DC fast charging in other parts of the city and will need funding for this work. [Action T-7: Make it easier to use electric vehicles if you can't charge at home.]

BFF City Fleet obtained \$433,000 for EV-charging at Kerby/Stanton yard from the Oregon DEQ Oregon Zero Emissions Grant Fund 2023. The grant money will be used to purchase Level 2 and DC fast chargers at one of the City's busiest maintenance yards. [Action B-2: Eliminate carbon from City operations.]

## Making freight cleaner

PBOT received a \$2 million grant from US DOT to pilot a Zero Emission Delivery Zone. This 18-month pilot will test a combination of incentives for local fleets to use clean modes of transportation to deliver goods. This includes regulations to prioritize access for zero-emissions vehicles in loading zones. [Action T-8: Make freight cleaner]

## Preventing wildfire

PP&R received a \$430,000 grant from FEMA for hazard mitigation. The grant was used to complete a fuel reduction project in Forest Park in partnership with PF&R and the Forest Park Conservancy. This improved defensible space for structures and a buffer area and will improve the overall health of the forest [Action W-1: Prioritize and implement wildfire prevention actions]

## Conserving habitat through mitigation banking

BES, along with other partners received a \$500,000 Metro 2040 grant. The City used the grant to design a pilot environmental mitigation bank at Eastbank Crescent. Mitigation banking allows industrial and other development to compensate for legally allowed environmental impacts by buying credits from a third party that has preserved, enhanced, or created habitat conservation areas in a similar ecosystem. Purchasing credits allows a development to proceed without resulting in a net loss of natural resources [Action F-3: Develop a mitigation banking program]

## Making the most of historic one-time General Fund investments

In FY 22-23, City Council allocated \$2.4 million in one-time general fund money to advance the objectives of the Climate Emergency Workplan. This was an unprecedented level of investment from the general fund into BPS policy and programs, including electric grid and transportation decarbonization, climate resilience in East Portland, carbon accounting and management in City operations, and embodied carbon policy development.

BPS hired five, limited-term positions to advance this work. These staff produced an impressive set of deliverables, including recommendations for advancing policy on embodied carbon in new construction; policy recommendations for addressing urban heat in East Portland; a feasibility study on



reducing carbon emissions from last-mile freight deliveries; and an analysis of carbon accounting and management in City operations.

BPS also used some of the funds to contract for professional, technical consulting expertise. Lighthouse Consulting helped BPS evaluate utility proposals for a community green tariff throughout 2023.

## **Heading into new waters**

The City transition will have a profound impact on how climate action is done in Portland. Fiscal year 2024-25 will be the last year of the Climate Emergency Workplan. The Sustainability and Climate Commission and Chief Sustainability Officer will direct the next iteration of Portland's climate justice plan, informed by the findings of the climate justice audit underway from the City Auditor's Office.

What won't change is the urgency and scale at which we collectively need to act and make investments to stabilize the climate and to help communities prepare for the impacts they're already feeling.



# Appendix: Climate emergency progress 2023-24

These are the actions required to eliminate carbon from (“decarbonize”) the built environment, vehicles, and industry and to replace it with clean, renewable energy sources that do not create planet-warming emissions.

Energy-related items are at the top because they must happen first in order for others to happen at all. To make it possible for buildings and cars to run on 100% carbon-free electricity, we must first decarbonize our grid — meaning, we must ensure that the electricity generated for Portland comes from renewable sources, not coal or natural gas.

In addition to accelerating the transition to cleaner fuels and electricity, rapidly reducing the amount of driving in our community is a key decarbonization priority.

Reducing the amount of driving also has numerous co-benefits for our community, including improved safety, public health, air and water quality, and supporting our vision for compact, mixed-use growth.

Since the 2015 Climate Action Plan, the City has endeavored to center racial equity, justice, and community benefit in the work of decarbonization. This is evident in many of the policy and programs listed below. We are not done with the journey toward anti-racism. We will continue to center the needs, benefits, and priorities of frontline communities in each of the actions listed in this Workplan.

<b>LEGEND</b>	★ Maps to Climate Emergency Declaration, 100% Renewable Energy Resolution, or 2035 Comprehensive Plan	<b>Status</b>	PP&D	Portland Permitting & Development (formerly BDS)	BFF	Bureau of Fleet and Facilities
	<b>PCEF</b> Denotes Portland Clean Energy Community Benefits Fund Investment (PCEF)	Achieved: Project completed.	BES	Bureau of Environmental Services	PBEM	Portland Bureau of Emergency Management
		Will achieve FY25: In process and expected to complete by FY25.	BPS	Bureau of Planning and Sustainability	PBOT	Portland Bureau of Transportation
		Ongoing: Long-term project that is on track and moving forward.	BPS (PCEF)	Portland Clean Energy Fund	PF&R	Portland Fire & Rescue
		Delayed: Project may need funding or support.	BRFS	Bureau of Revenue and Financial Services (City Risk)	PP&R	Portland Parks & Recreation
			JOHS	Joint Office of Homeless Services	PWB	Portland Water Bureau

<b>ELECTRICITY SUPPLY</b>	<b>No.</b>	<b>Action</b>	<b>Bureau(s)</b>	<b>Progress in FY 2022-23</b>	<b>Status</b>	<b>Finish Date</b>
	E-1	★ Implement the state 100% clean electricity law.	BPS	BBPS, along with Multnomah County, continued engaging with Portland General Electric and other municipalities on the concept of a communitywide green tariff. In July 2024, PGE informed the City that the utility will not file the tariff due to rising rates and significant constraints and costs in the renewable energy development market. Based on tariff proposals shared over the year, BPS agreed that what the utility was offering would not be a good deal for Portland ratepayers. BPS and the utilities are currently evaluating next steps for achieving shared goals around electric grid decarbonization.	Delayed	24-25
E-2	Invest in community-owned renewable energy generation.  <b>PCEF</b>	BPS (PCEF)	In the five-year Climate Investment Plan (CIP), PCEF plans to invest \$397 million through community responsive grants and five strategic programs that include opportunities for renewable generation. So far, solar investments through community responsive grants include 19.6 kW of installations, with another 5 MW planned.  Solar installed to date: 19.6 kW Solar planned/funded: 5 MW	Ongoing	Ongoing	

BUILDINGS	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	B-1	★ Eliminate carbon from existing buildings in the private market.	BPS	<p>BPS released a policy proposal to expand the current commercial building energy reporting requirements to include multifamily residential buildings. The proposal included notifying prospective tenants of climate and health information before they rent. A public comment period was open from May 15 through June 14, 2024. In light of the City charter transition, this policy will not be heard at City Council in 2024. BPS will pilot elements of the proposal with multifamily buildings as part of PCEF CIP Strategic Program 2.</p> <p>Climate and Health Standards for Existing Buildings, a policy that focuses on community Climate and Health Standards for Existing Buildings, a policy that focused on community priorities to improve the health, safety, and climate resilience of rental housing, while reducing displacement of economically vulnerable renters and decarbonizing Portland’s largest apartments and commercial buildings, has been delayed due to economic conditions.</p>	Delayed	23-24
	B-2	★ Eliminate carbon from City operations.  PCEF	BPS BFF PWB	<p>Bureaus continue to meet the City’s goal of 100% clean energy for City operations. BPS facilitates bureau subscriptions to clean power purchasing options from our utility partners, supports on-site renewable energy development, and purchases renewable energy credits on behalf of City bureaus. Staff have identified potential opportunities for centralized building decarbonization strategies once the City transition takes effect, including updating the Green Building Policy and implementing a City-wide Energy Saving Performance Contract.</p> <p>Bureau of Fleet and Facilities (BFF) is has transitioned ten percent of the City’s fleet to non-internal combustion engines. Throughout FY25-29, BFF plans to decarbonize over 800 light duty vehicles and double the number of dedicated EV charging ports for City vehicles, using a \$25 million investment from the PCEF CIP and other incentives. BFF’s goal is to reach a 30% net-zero conversion by 2030.</p> <p>BFF City Fleet obtained \$433,000 for EV-charging at Kerby/Stanton yard from the Oregon DEQ Oregon Zero Emissions Grant Fund 2023. The grant money will be used to purchase Level 2 and DC fast chargers at one of the City’s busiest maintenance yards. The City’s first fast charger was installed at Mt. Tabor Transit Yard in March 2024, bringing the total City-owned charging ports to 147. Over 200 new charging ports are expected to come online in the next five years to fuel Portland’s expanding green fleet.</p> <p>PWB has developed a net zero 2050 plan and has identified priority strategies to neutralize bureau emissions through energy efficiency, renewable generation, fleet electrification, and more. PWB will make efficiency upgrades to its groundwater pump station and Interstate Building, add solar arrays to suitable sites, and construct a micro-hydro turbine in Washington Park in FY 25-29 with investment from PCEF.</p>	Ongoing	23-24
	B-3	Implement energy retrofits, including life, health, and safety improvements on homes owned by priority populations and on affordable multifamily and single family rental housing properties.  PCEF	BPS (PCEF)	<p>Projects funded by the first two rounds of PCEF community responsive grants have completed upgrades in 343 homes, 232 of which are mechanical system upgrades and primarily heat pumps. Each project had a 30% allowance for health and safety measures used for items like roof repair, mold mitigation, and needed electrical upgrades.</p> <p>These first two rounds of grant funding will cumulatively help install a combination of energy efficiency and renewable upgrades including an estimated 1,700 heat pumps, 900 heat pump water heaters, 750 lighting upgrades, and over 700 high efficiency ventilation improvements in over 1,800 affordable multifamily units, 700 single family homes, and five non-profit commercial buildings</p> <p>Through the adopted five-year Climate Investment Plan, PCEF is investing \$275 million to fund clean energy upgrades in 4,815 affordable multifamily units, 3,050 moderate- and low- income single family homes, and 140 commercial buildings.</p>	Ongoing	Ongoing



BLDGS	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	B-4	★ Lower embodied carbon in the built environment.	BPS	BPS hosted a learning cohort for City staff and regional partners including Metro Oregon, Oregon Department of Environmental Quality, and Prosper Portland, participating in the C40 Cities Clean Construction e-learning program from September to October 2023. BPS published a report, "Recommendations to Reduce Embodied Carbon in the Built Environment," in March 2024.	Ongoing	24-25

TRANSPORTATION	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	T-1	★ Make low-carbon travel options safe, accessible, and convenient for all Portlanders.  PCEF	PBOT	<p>Multiple PBOT-led systems and programs continue to help the public shift to more sustainable, affordable modes of travel. Multimillion-dollar investment from PCEF in FY 25-29 will allow PBOT to expand and enhance active transportation infrastructure, including more frequent maintenance of bike lanes, and construction of bike routes and pedestrian crossings. It will also support PBOT in continuing to deliver community programming including Safe Routes to School, Portland Sunday Parkways, Portland By Cycle, and Neighborhood Greenways enhancement and encouragement.</p> <p><b>Safe Routes to Schools:</b> PBOT's Safe Routes to School program expanded its Transportation Academy program — where students are taught safe e-bike riding and given a free helmet and BIKETOWN for All membership — to Parkrose and McDaniel high schools.</p> <p><b>Streetcar and transit:</b> Last fiscal year, Portland Streetcar, which operates on 100% renewable electricity, carried over 2.9 million riders, an increase of nearly 12% over the previous fiscal year. It also continues to catalyze dense, walkable urban development, a model for climate-smart housing and economic development.</p> <p>Major opportunity sites around the streetcar system continue to provide economic investment and dense development in Portland. This includes the Broadway Corridor, the OMSI Master Plan area, Lower Albina, and other large-scale redevelopment sites. For example, the extension to Montgomery Park will create a new connection between downtown and a major employment center and add new streets and facilitate a new walkable mixed-use development.</p> <p>PBOT continues to invest in transit signal priority and other transit priority infrastructure investments to improve transit speed and reliability, in coordination with ODOT, TriMet and regional partners.</p> <p><b>E-mobility (BIKETOWN, e-scooters, and shared fleets):</b> Portland's BIKETOWN bike-share program saw continued ridership growth in FY 23-24, with trips rising 8% over the previous FY to 665,400, and added 14 new stations in 2023 to increase access. PBOT also continues to provide accessible, low-carbon options for people living on low incomes through its BIKETOWN for All program and rents accessible bikes for people with disabilities through Adaptive BIKETOWN.</p> <p>E-scooter trips for FY 23-24 rose 10% over the previous fiscal year to 1,189,100. This pilot program has announced its permanent operators — Lime and Lyft — that will provide increased availability and citywide service.</p> <p>Finally, PBOT collaborated with Lyft and Zipcar to apply to PGE's Drive Change program for funding planning and implementation of curbside e-mobility hubs that would support shared and personal micromobility fleets and electric vehicles. PBOT applied for a \$2 million grant from the US Joint Office for Energy and Transportation to pilot 3-4 E-Mobility Hubs to accelerate transportation electrification of all modes in partnership with Lime, Zipcar, It's Electric, Portland State University, and Forth. The E-Mobility Hubs will be co-located with existing electric, shared fleet services and provide public EV charging, EV charging for electric Zipcars, secure parking for micro-mobility, and e-scooter charging.</p>	Ongoing	22-23 23-24 24-25

TRANSPORTATION	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	T-2	★ Use equitably designed pricing strategies and parking management to encourage less driving when people and businesses have other travel options.	PBOT	PBOT worked with ODOT and other regional partners to influence development of the Regional Mobility Pricing Project, in line with the principles laid out by the Pricing Options for Equitable Mobility task force. Although the regional pricing project is not moving forward at this time, the use of pricing principles developed by the task force continues to guide PBOT's parking management work to meet City goals.	Delayed	TBD
	T-3	Decouple transportation funding from fossil fuels.	PBOT	PBOT continues to look for ways to stabilize transportation revenue decoupled from fossil fuels. This includes talking with regional, state, and federal legislators. We expect this to be a major part of the 2025 state legislative session as well as the federal surface transportation authorization.	Ongoing	TBD
	T-4	★ Make low-carbon transportation options more affordable, especially for those who can least afford them.  PCEF	PBOT BPS (PCEF)	<p>PCEF's five-year Climate Investment Plan allocates \$80 million to community responsive grants and strategic programs in Transportation Decarbonization, a newly eligible funding area. These programs include a new e-bike rebate program and an expansion to PBOT's Transportation Wallet: Access for All program.</p> <p>In 2023, PBOT kicked off the first year of its permanent Transportation Wallet: Access for All program, more than tripling what was distributed during the 2021-2022 pilot phase. This program is funded through a parking fee and PCEF (as of FY 24-25) and includes partnerships with 18 community-based organizations. The program provides free access to transit, bike-share, e-scooters, and ride-share. In just six months, PBOT distributed over 1,300 transportation "wallets" to individuals or households living on a low income.</p> <p>The Transportation Wallet: Access for All program is a key initiative in the PCEF Climate Investment Plan under Strategic Program 7: Equitable Transportation Access (SP 7). Through SP 7, PBOT will receive \$25 million over five years to stabilize and expand the program. PCEF dollars will also go towards BIKETOWN for All, increasing access for people who receive Transportation Wallets and others who qualify for the reduced-fare program. In 2023, BIKETOWN for All had 4,100 members who took 375,800 bike-share trips</p>	Ongoing	TBD

TRANSPORTATION	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	T-5	Support state and regional vehicle miles traveled (VMT) reduction policies.	PBOT BPS	<p>PBOT and BPS coordinated with the Office of Government Relations to provide testimony in support of robust new Transportation Planning Rules, and related requirements, as part of rulemaking for the Oregon Department of Land Conservation and Development’s Climate-Friendly and Equitable Communities (CFEC) program. The program was first adopted in July 2022, then amended in April and November of 2023.</p> <p>PBOT and BPS also engaged with Metro and other regional partners to update the 2023 Regional Transportation Plan so that it reflects new rulemaking on reducing VMT.</p> <p>PBOT and BPS work with Metro and ODOT on implementing and updating the Regional Mobility Policy. This elevates the policy’s focus on reducing vehicle miles traveled (VMT) and minimizes its focus on vehicle speeds, in line with CFEC rulemaking.</p> <p>These policies, along with many other transportation and land use actions described in this report, help create a Portland where it’s easier for people to get around without having to drive alone.</p>	Will achieve FY25	22-23
	T-6	★ Make new construction ready for electric vehicle charging.	BPS PP&D	<p>On February 8, 2023, Portland City Council unanimously approved the EV-Ready Code Update.</p> <p>Staff will scope EV-Ready Phase 2 over the next year. This will identify zones not included in the EV-Ready Phase 1 requirement and determine whether to pursue EV-Ready requirements applicable to those zones. These may include industrial, institutions, single-family and existing buildings which are not already covered.</p>	Achieved	22-23 23-24 24-25
	T-7	★ Make it easier to use electric vehicles if you can’t charge at home.	PBOT PP&D BPS	<p>PBOT’s Director adopted administrative rules for PBOT’s Electric Vehicle (EV) Charging in the Right-of-Way project in December 2023. Contract negotiations are underway, and the first curbside EV chargers should be installed in the 2024-25 fiscal year.</p> <p><b>Community engagement:</b> City staff are working to increase access to electric mobility options in existing multifamily buildings for low-income residents. To ensure this work is grounded in and informed by the community, BPS partnered with Rocky Mountain Institute (RMI) for a community engagement listening session with residents of Hazel Heights, a low-income affordable housing multifamily building owned by Central City Concern. The goal of the listening session was to understand affordable housing resident commuting patterns, perspectives on electric mobility, and barriers and opportunities related to their electric mobility access and use. BPS staff helped connect Central City Concern with grant opportunities and resources to support their electric mobility vision for Hazel Heights, as informed by the listening session. RMI drafted a findings report.</p> <p>The U.S. Department of Energy awarded PBOT a \$3.5 million grant to conduct robust community engagement and education, install up to 50 EV chargers in historically underserved communities, and write a toolkit on curbside charging to share best practices with other municipalities. PBOT is also exploring other code and administrative rule changes that would expand Level 2 charging and DC fast charging in other parts of the city and will need funding for this work.</p>	Will achieve FY25	22-23 23-24 24-25

TRANSPORTATION	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	T-8	★ Make freight cleaner.	PBOT	<p>Thanks to a \$2 million grant from the U.S. Department of Transportation, PBOT began work on a Zero-Emission Delivery Zone and testing digital infrastructure tools. This 18-month pilot project will test a combination of incentives for local fleets to use clean modes of transportation to deliver goods. It will include a 6-month demonstration period where regulations to prioritize access for zero-emission vehicles in loading zones will be enforced.</p> <p>This project connects with LU-3. Based on lessons learned and early successes in the initial pilot to date, PBOT is planning to pursue a stage-two implementation grant of up to \$15M in FY 24-25.</p> <p>PBOT also applied for a \$5.6 million grant from the U.S. Joint Office for Energy and Transportation to test a variety of strategies to reduce barriers to freight decarbonization based on stakeholder feedback from piloting a Zero-Emission Delivery Zone. This project would provide rebates for local businesses to purchase zero-emission delivery vehicles and accompanying charging infrastructure, offer workforce training opportunities and support the establishment of a new neighborhood micro-distribution hub to expand micro-freight delivery.</p>	Will achieve FY25	22-23 23-24 24-25
T-9	Replace petroleum diesel at the pump.	BPS	<p>Portland City Council unanimously approved updates to the renewable fuel standard in December 2022. By 2030, all petroleum diesel will be phased out at the pump. The first policy milestone occurred on July 1, 2024, when the blend requirement of 15 percent renewable fuel (at a CI standard of 40 or lower) went into effect.</p> <p>This year, BPS developed the programmatic elements of RFS implementation. This included working with the fuel industry in two rounds of rulemaking to develop options for compliance, reporting, and other technical details; communicating with hundreds of local businesses; reaching out to dozens of individual stakeholders; staffing a help desk and customer service operation; and building a compliance database.</p> <p>The RFS Technical Advisory committee met three times in preparation for delivering their report to the BPS Director in 2025.</p>	Achieved	22-23	

INDUSTRY	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	I-1	Develop strategies for the industrial sector to reduce emissions, pollution, and waste, and follow inclusive practices.	BPS	<p>In June 2023, BPS published the Portland Clean Industry Study which provided recommendations to reduce industrial carbon emissions, air pollution, and waste as well as improve equity in inclusion in the industrial sector. The study identified the metals and food and beverage manufacturing subsectors as priority areas for action.</p> <p>In January 2024, BPS and Portland State University (PSU) announced a two-year partnership to implement recommendations from the study, with an emphasis on providing technical assistance to industrial businesses applying for federal funding.</p> <p>BPS received the U.S. Department of Energy Community Energy Innovation Prize to launch an inclusive industrial symbiosis ecosystem in partnership with PSU, Prosper Portland, Columbia Corridor Association, and five other partner organizations. The prize brought in \$100,000 so far, with more potentially on the way. BPS also hosted visitors from Denmark, Brazil, and Washington state to share learnings on industrial symbiosis and train professionals in industrial policy and technical assessments.</p>	Ongoing	23-24

	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
<b>LAND USE</b>	LU-1	★ Increase ongoing capacity to develop plans for centers and corridors to encourage compact mixed use communities with easy walking and biking access to services like grocery stores, jobs, schools, and medical care. Prepare implementation and investment plans for centers and corridors with adopted area plans, in coordination with infrastructure bureaus.	BPS PBOT BES PP&R PWB	<p>BES, BPS, BES, PBOT, PP&amp;R, and PWB continue to coordinate investments that provide more effective implementation of the City's growth management goals, including areas in West and East Portland.</p> <p>BPS continues to implement and refine the 2035 Comprehensive Plan and to support climate-friendly growth and development in Comprehensive Plan designated centers and corridors. This work includes supporting infrastructure investment in the adopted West Portland Town Center (2022) and completion of the Lower Southeast Rising Area (2024) plan. The Housing Needs Analysis (HNA) completed in 2023, Housing Regulatory Relief (HRR) completed in 2024, and the Housing Production Strategy (HPS) slated for completion later in 2024 address the city's housing crisis through climate-friendly growth strategies.</p> <p>Currently, BPS is working with state and local partners on the Montgomery Park Area Plan, and the Lower Albina planning process to advance planning for new dense, transit oriented, equitable neighborhoods. Additionally, BPS has received funding from the State of Oregon to conduct an infrastructure gap analysis in Portland's Inner Eastside, which will support a future planning process. The Inner Eastside has excellent access to shopping, services and transit and could accommodate an increase in housing capacity. BPS is also coordinating with other bureaus on planning efforts along the 82nd Avenue corridor. The corridor is slated for major transportation improvements, including bus-rapid transit. There are five Comprehensive Plan designated centers along 82nd Avenue with potential for new housing and employment uses that would be better connected by transit.</p> <p>BES continues to participate in the Infrastructure Investment Coordination Team with BPS, PBOT and PWB. BES provides ongoing coordination with BPS on growth/area plans that promote increased development along corridors served by active transportation (e.g., walking, biking, transit).</p>	Ongoing	22-23 23-24 24-25
	LU-2	★ Work with existing communities to avoid economic and cultural displacement as neighborhoods grow and change. Develop strategies to ensure that new development better reflects the full range of people and cultures in Portland and is more accessible to people at all income levels.	BPS	<p>A number of ongoing long range land use planning efforts involve working with existing communities to minimize and avoid economic and cultural displacement. In conjunction with zoning regulations, Planning staff are using a non-regulatory tool, a Public Benefit Agreement, to achieve a variety of public benefits including affordable housing; commitments for middle wage jobs and/or funding for job training and workforce development; the provision of a 40,000 sq ft public park, commemoration of York, an enslaved member the Lewis and Clark Expedition after whom York Street is named, and contributions a local improvement district to fund a Streetcar extension to the area. In this process, staff have been working with the York Work Group, a community group that, has been working to advance goals around commemorating York and creating an inclusive community in the area.</p> <p>Planning staff are working to support a community-led planning process in the Lower Albina area. BPS Planning staff is partnering with other city Bureaus, Albina Vision Trust and ODOT and its advisory board the Historic Albina Advisory Board (HAAB) to support and identify governance and financing structures that will facilitate a future development by a community based organization and opportunities for wealth building opportunities for Black Portlanders on the highway cover that will be built as part of the I5 Rose Quarter Transportation Improvement Project with in the Lower Albina area.</p> <p>The state required Housing Production Strategy (HPS), which was led by BPS and is expected to be adopted by City Council in August, identifies actions the city will take over the next five years to facilitate housing production at all income levels including deeply affordable housing (0-30% MFI); BPS Staff obtained grant funding from DLCD to conduct targeted engagement with BIPOC communities to get input on inform the strategy; grant funding was used to compensate community groups directly for their participation, a practice that is also used to build capacity among the groups.</p> <p>Planning staff use the Racial Equity Toolkit to help guide outreach and engagement and policy evaluation and recommendations when scoping and starting long range planning projects to ensure equitable process and outcomes.</p>	Ongoing	Ongoing

LAND USE	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	LU-3	Explore the feasibility of last-mile urban logistics hubs and right-sizing the number of Central City off-street loading/unloading areas to support the decarbonization of delivery vehicles.	BPS PBOT	Staff drafted a micro-delivery vehicle hub feasibility report that currently is being finalized. This report includes actionable recommendations intended to facilitate the siting and improved operation of low-carbon micro-delivery hubs.	Will achieve FY25	22-23 23-24 24-25

EMBODIED CARBON/FOOD	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	S-1	Prevent food waste through business and residential outreach and engagement.	BPS	<p>BPS continues to participate in regional collaborations like <i>Food Waste Stops with Me</i> and <i>Eat Smart, Waste Less</i>.</p> <p><i>Food Waste Stops with Me</i> is a business-facing program focused on prevention, donation, and composting. This Metro-led collaboration produces case studies, educational videos, community partnerships, on-site technical assistance, and outreach campaigns. <i>Eat Smart, Waste Less</i> is a residential-facing program focused on food waste prevention.</p> <p>Portland also participates in state and national residential food waste prevention campaigns such as <i>Food Waste Prevention Week</i> and <i>Don't Let Good Food Go Bad</i>. As a founding signatory of the Pacific Coast Food Waste Commitment, we continue to partner with other west coast cities and states around bringing together food industries to identify food waste reduction opportunities and collaborate on solutions.</p>	Ongoing	Ongoing
S-2	Reduce food waste through business and residential composting and the donation of edible surplus food.	BPS	BPS continues to implement the regional Food Scrap Policy. Enforcement for all food generating businesses began in September 2024. BPS also continues to support residential composting.	Ongoing	Ongoing	

EMBODIED CARBON/FOOD	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	S-3	★ Invest in community-led opportunities to rent, share, fix, and reuse goods.	BPS	<p>BPS's garbage and recycling team is actively reconnecting with reuse, repair and share organizations in Portland to understand needs around building out community reuse infrastructure. During this time, work continues to divert reusable materials at city-wide Dumpster Day (bulky, household item collection) events, which diverted over 400 cubic yards of material for reuse or mattress/box spring recycling last fiscal year. Reuse organizations included The Rebuilding Center, Community Warehouse, and Habitat for Humanity.</p> <p>An additional 330 cubic yards was diverted from the landfill during bulky waste collection events at affordable housing in partnership with nonprofits like Sabin CDC, NAYA, Rose CDC, and Reach CDC.</p> <p>Tool libraries are one area of expansion for 2024. The SW Portland Tool Library is now available for SW Portland residents to access tools at no/low cost while reducing embodied carbon from avoiding tool purchases.</p> <p>BPS's garbage and recycling team plans to engage with the Reuse Collective, a group of reuse non-profits in Portland that meet to discuss collaboration and peer support. Future collaboration with this group could include commissioning a study on reuse to understand impact and importance to community as well as barriers to access.</p>	Ongoing	23-24

CROSS-SECTOR	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	C-1	★ Implement the internal cost of carbon in City decision-making.	BPS PP&R OMF/CBO BES PBOT PWB	<p>City Council's Decision Package #17611 (Climate Performance and Accountability) provided BPS funding for a one-year Internal Cost of Carbon Analyst in FY 23-24. The analyst contributed to several meaningful bureau efforts to quantify and manage carbon emissions in decision making:</p> <ul style="list-style-type: none"> <li>Produced a fleet conversion tool for BFF to evaluate and quantify carbon benefits of replacing internal combustion engines with electric vehicles.</li> <li>Supported BES in benchmarking and quantifying carbon emissions from representative pipe construction and replacement projects, including Inverness Pump Station.</li> <li>Conducted a solar assessment of Water Bureau properties with the potential to develop additional on-site solar to reduce electricity-based emissions</li> </ul> <p>As PWB develops initial strategies for its net zero plan, staff have implemented internal cost of carbon analyses to help evaluate project alternatives and identify those with the greatest climate and social impact and the highest return on investment.</p> <p>BES, with support from BPS's limited duration staff, developed a template for sewer pipe projects based on piloted internal cost of carbon work on two recent sewer projects. BES also looked at operational GHG emission differences between alternative lifespans for the Inverness Pump Station, which is currently in planning.</p>	Ongoing	23-24

# Resilience priorities

These are the actions required to make Portlanders and our communities more resilient to the current and future impacts of climate change.

<b>LEGEND</b>	★ Maps to Climate Emergency Declaration, 100% Renewable Energy Resolution, or 2035 Comprehensive Plan	<b>Status</b>	PP&D	Portland Permitting & Development (formerly BDS)	BFF	Bureau of Fleet and Facilities
	<b>PCEF</b> Denotes Portland Clean Energy Community Benefits Fund Investment (PCEF)	Achieved: Project completed.	BES	Bureau of Environmental Services	PBEM	Portland Bureau of Emergency Management
		Will achieve FY25: In process and expected to complete by FY25.	BPS	Bureau of Planning and Sustainability	PBOT	Portland Bureau of Transportation
		Ongoing: Long-term project that is on track and moving forward.	BPS (PCEF)	Portland Clean Energy Fund	PF&R	Portland Fire & Rescue
		Delayed: Project may need funding or support.	BRFS	Bureau of Revenue and Financial Services (City Risk)	PP&R	Portland Parks & Recreation
			JOHS	Joint Office of Homeless Services	PWB	Portland Water Bureau

<b>FLOODING</b>	<b>No.</b>	<b>Action</b>	<b>Bureau(s)</b>	<b>Progress in FY 2022-23</b>	<b>Status</b>	<b>Finish Date</b>
	<b>F-1</b>	★ Update floodplain maps based on modeling by federal and state agencies and apply new regulations to maintain Portlanders' access to federal flood insurance and disaster funding, reduce the impacts of future flooding and support recovery of threatened and endangered species.	BPS BES PP&D PBOT	BPS, BES, PP&D, and PBOT, as well as jurisdictional partners, continue to coordinate an effort to update the City's floodplain maps.  Progress continued on the Willamette River and Columbia River modeling reported last year. BES collaborated with the U.S. Army Corps of Engineers to develop a new floodplain map showing the expected extent of a flood similar to that experienced in February of 1996 (the City's most recent large flood).  The 1996 flood extent was incorporated into regulatory updates in the Floodplain Resilience Plan (adopted in October of 2023). In October, PP&D also updated Title 24 of City code to apply new flood requirements to the Columbia River, portions of the Willamette River, and Fanno Creek.  In partnership with PBEM, BES secured a FEMA grant this year to develop a scope for updating flood maps and the Flood Insurance Study on Johnson Creek.	Ongoing	22-23 23-24 24-25
<b>F-2</b>	★ Update the hydraulic and hydrologic (H&H) models for Johnson Creek.  Update floodplain maps (based on new modeling) and Titles 33 and 24 floodplain codes for Johnson Creek. Develop programs to assist property owners as needed.	BPS BES PP&D PBOT	In partnership with PBEM, BES secured a FEMA grant this year to develop a scope for updating flood maps and the Flood Insurance Study on Johnson Creek. This is the first step in securing resources to update the hydraulic and hydrologic (H&H) models.	Ongoing	23-24 24-25	



FLOODING	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	F-3	★ Develop a mitigation banking program to maintain flood storage capacity and habitat and a long-term operations and maintenance plan.	BES BPS PP&D	The City's pilot Environmental Mitigation Bank at Eastbank Crescent at OMSI is moving into 30% design thanks to a \$500,000 Metro 2040 grant. The mitigation bank is coordinated with the OMSI Development Agreement overseen by Prosper Portland. The City, OMSI, and Columbia River Inter-Tribal Fish Commission are also negotiating a separate partnering agreement.	Ongoing	22-23 23-24 24-25
	F-4	★ Expand the Willing Seller Program to acquire frequently flooded properties along Portland's waterways that provide critical floodplain functions.	BES	This fiscal year, BES expects to acquire three properties (3.4 acres) and four conservation easements for a total of 22.08 acres protected. Two more properties (2 acres) are under contract and should close in summer 2024. BES is partnering with Metro on other acquisition candidates in the Johnson Creek Watershed and investigating conservation easement opportunities in the Columbia Slough Watershed.	Ongoing	Ongoing
	F-5	★ Identify key floodplain and wetland sites then design and construct them to reduce flood risk, restore habitat, improve water quality and serve as community and educational amenities.	BES	Construction of the Cedar Crossing Restoration Project on Johnson Creek was completed in Fall 2022. The Springwater Wetlands Enhancement project in the Johnson Creek floodplain is under construction and expected to be completed in 2024. West Lents Floodplain Restoration and Johnson Creek Oxbow Enhancement projects to be completed in 2025 and 2026, respectively. These projects are reducing community flood risk, improving water quality, and restoring habitat.  A series of culvert replacements are in design with construction schedule to be determined, with the exception of Miller Creek culvert replacement which will be implemented in 2024. Natural processes are being monitored and accommodated across many acres of natural areas owned by the City.  There are also a handful of BES Watershed Investment Fund projects in design to provide future climate resilience including Crystal Springs Lake and the Crystal Springs Rivelli site.	Will achieve FY25	Ongoing

TREES (CANOPY)	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	T-1	★ Update and implement Urban Forestry Management Plan.	PP&R (Urban Forestry) BES BPS BPS (PCEF)	<p>The project team for the (now renamed) Portland Urban Forest Plan concluded the Listening &amp; Learning phase in May 2024. This included a well-attended open house, public survey, focus groups with priority communities, and meeting with city advisory committees and commissions, environmental organizations, neighborhood associations, business and industry groups, labor unions, and other interested stakeholders.</p> <p>A State of the Urban Forest report is also being produced which includes in depth analysis of current tree canopy coverage, tree planting and removal data, and causes of recent canopy decline. This project is on schedule with planned completion in Spring 2025.</p>	Will achieve FY25	22-23 23-24
	T-2	★ Update Title 11 regulations to improve tree preservation, increase resources for tree planting in high priority communities.		<p>The project to update Title 11 regulations will begin in late 2025, following completion of Portland Urban Forest Plan. The Portland Urban Forest Plan will provide policy direction that will inform the needed updates.</p>	Ongoing	Starting within the next 2 years
	T-3	<p>★ Expand tree planting in East Portland and other priority neighborhoods, parks, and outdoor community spaces through existing pathways and funding for community organizations.</p> <p><b>PCEF</b></p>		<p>PCEF's Climate Investment Plan Strategic Program 8: Equitable Tree Canopy (SP 8) program is launching. The first contracts will support planting the initial 1,000 trees under this program in the 2024-25 planting season. Larger scale RFPs will be released later this year for the 2025-26 planting season and beyond.</p> <p>Planting should begin in Fall/Winter 2024-25. BPS is leading the development of a community and professional workgroup to support the program. PP&amp;R Urban forestry (UF) is building staff capacity, training new staff, and building training materials for new and emerging contractors. UF has solicited interest forms from potential contractors to assist with outreach and tree give away signups. UF is enhancing technology and systems.</p> <p>SP 8 will work in Portland's most heat-vulnerable neighborhoods to equitably plant and establish at least 15,000 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. The program will also support the development of a diverse, well-trained workforce and contracting community for tree planting and maintenance.</p> <p>There is also another \$5 million in PCEF funding allocated for street tree expansion along 82nd Avenue, which will fund approximately 2,500 linear feet (equivalent to thirteen 200-foot blocks) of sidewalk widening and tree planting along 82nd Avenue.</p> <p>Per Resolution 37635, Portland Parks and Recreation's Urban Forestry division is taking over responsibility for establishment of trees previously planted by the Environmental Services Tree Program. PCEF funding of \$7 million will support this transition and the planting of approximately 2,000 additional trees between 2024 and 2029 on private property, prioritizing communities where trees are needed the most.</p> <p>The Urban Forestry division will also begin proactive care for the City's 240,000 street trees, shifting the responsibility of maintenance from homeowners to the City. This monumental shift is funded by a \$65 million PCEF investment. Every street tree will be placed into a five to ten-year management cycle of inspection, structural pruning, hazard abatement, removal, and replacement. This transition will improve tree health and longevity, and expand street tree planting opportunities by removing the maintenance cost burden for homeowners.</p>	Ongoing	Ongoing

NATURAL RESOURCES/GREEN INFRASTRUCTURE	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	NR-1	★ Ensure that environmental protections are applied to the City's important natural resources through the Ezones Map Correction Project and continued application of Drainage Reserve Rules to protect water quality and flow.	BPS BES	<p>Staff are currently working on the Columbia Corridor and Industrial Lands (CCIL) Ezone Project to update the environmental overlay zones in the Columbia Corridor, with a special emphasis on industrial properties. A range of environmental protection scenarios will be considered as a part of the CCIL Ezone Project. The potential implications for industrial lands of each of the scenarios will be evaluated in the Economic Opportunity Analysis (EOA) effort. The CCIL Ezone Project and EOA will be considered at the same time by the Planning Commission and City Council.</p> <p>BES is a part of the EOA project team and is providing documentation to substantiate the presence of natural resources in support of the CCIL Ezone Project and is working with BPS to identify potential zoning code changes to support the restoration and maintenance of natural areas, including streams, floodplains, and critical habitats.</p>	Ongoing	22-23 23-24 24-25
	NR-2	<p>Continue support for community-based organizations doing watershed stewardship, community engagement, and education.</p> <p>PCEF</p>	BES PP&R PBEM	<p>PP&amp;R continues to support and facilitate volunteer watershed stewardship and environmental education events in partnership with community organizations</p> <p>BES also partners with watershed councils in deep ways to ensure community participation, education, and stewardship in stormwater management and watershed health. Partners include the Columbia Slough Watershed Council, the Johnson Creek Watershed Council, the Westside Watershed Alliance, and Tryon Creek Watershed Council. In addition, numerous organizations are supported through Community Watershed Stewardship grants and Neighborhood to the River grants.</p> <p>These investments allow for community-generated and -led projects that support watershed and stormwater solutions and participation. BES is also a part of collective work such as the Clean Rivers Coalition. Ensuring people are connected to the preservation of our watersheds plays a key part in climate resilience goals. The Johnson Creek Watershed Council is one example of this type of partnership. Their ability to engage Blueprint Foundation in the "Back 5" project at Leach Botanical Gardens has provided equitable access to land conversation and the creation of a next generation of stewards</p> <p>BES community engagement programming is supported as part of Portland Clean Energy Community Benefits Fund (PCEF) investments of over \$70 million over 5 years to sustain critical BES work in watershed stewardship, restoration, stormwater management, blue-green infrastructure, and revegetation.</p>	Ongoing	Ongoing
	NR-3	★ Incorporate climate resilience into the Economic Opportunities Analysis (EOA). This includes allowing space for trees, protection of wetlands, riparian corridors, and other natural areas.	BPS BES PP&R	<p>As a part of the Economic Opportunity Analysis (EOA) project team, BPS environmental planners are working to incorporate climate resilience into the EOA through the Columbia Corridor Industrial Lands (CCIL) Ezone Project and a forthcoming Willamette River North Reach project. Environmental planners on the EOA project team will evaluate protections of natural resources, including rivers, streams, wetlands and trees, while also balancing needs for industrial growth in the city.</p> <p>BES is providing support to the EOA and CCIL processes to support the protection of wetlands, riparian corridors, stream health, floodplains, and wildlife habitat. BES completed its work on the City's wetland inventory. Currently, BES is providing technical information to support the placement of ezones (see NR-1). BPS intends to complete the EOA and changes to the ezones by December 2024.</p>	Ongoing	22-23 23-24

NATURAL RESOURCES	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	NR-4	<p>★ Launch the development of a citywide green infrastructure systems plan building on the work completed 2019-2020.</p> <p>PCEF</p>	<p>BES</p> <p>PBOT</p> <p>PP&amp;R</p> <p>BPS</p> <p>BPS (PCEF)</p> <p>PBEM</p>	<p>The City invests heavily in green infrastructure as a part of many public infrastructure projects. These green investments help manage stormwater, cool neighborhoods, increase habitat, and contribute to neighborhood livability.</p> <p>PCEF's green infrastructure-focused investments support urban tree canopy expansion efforts, bioswales, depaving, and other projects that use vegetation, soils, and other elements to sequester carbon emissions. The PCEF Climate Investment Plan includes projects to mitigate climate disparities and contribute to community climate resilience, delivered by nonprofit organizations and City bureaus. Overall green infrastructure investments in the Climate Investment Plan total over \$55 million over five years. Additional PCEF allocations have been made totaling over \$177 million over five years to green infrastructure projects and programs delivered by Portland Parks &amp; Recreation and Bureau of Environmental Services.</p> <p>The City is committed to continuing investing in green infrastructure in the coming years. However, development of a citywide green infrastructure plan is currently delayed due to lack of resources and the need for a clear lead entity.</p>	Delayed	TBD

WILDFIRE	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	W-1	<p>★ Prioritize and implement wildfire prevention and response actions from the Multnomah County Wildfire Protection Plan and State Wildfire plans and other emergency plans, including:</p> <ul style="list-style-type: none"> <li>• Promote fire-wise landscaping and material selection on homes</li> <li>• Invasive species management and fuel reduction (including ladder fuels) to maintain safe fuel levels in natural areas</li> <li>• Fire road maintenance</li> <li>• Reduce human induced fire risk</li> <li>• Work with electrical utilities on powerline/ fire prevention issues</li> </ul>	<p>PBEM</p> <p>PF&amp;R</p> <p>BPS</p> <p>PP&amp;R</p> <p>JOHS</p>	<p>PP&amp;R continues to coordinate with PF&amp;R to encourage Firewise landscaping in neighborhoods near PP&amp;R-managed natural areas. PP&amp;R also continues to actively manage invasive species on its sites to manage fuels, and to pursue additional funding for fuels management.</p> <p>PF&amp;R has conducted outreach in many areas of the city that are located within wildfire hazard zones (WHZ) since 2019. PF&amp;R has raised awareness in the communities that live close to or within the wildland-urban interface (WUI) to educate residents about how to live with the potential of wildfires and empower them to learn ways to reduce the risk. Firewise communities have also been created in seven communities since 2020, including five around Forest Park, and more are lined up to gain the recognition.</p> <p>PF&amp;R participated in many volunteer fuel mitigation events in the Firewise communities to reduce the invasives and downed limbs from winter storms or wind events throughout the year. PF&amp;R also partners with PP&amp;R and Forest Park Conservancy to conduct fuel mitigation volunteer events on the boundaries of PP&amp;R property to create defensible space within 200 feet of residential structures. PF&amp;R continues to have dialogue with PP&amp;R regarding fire road maintenance and recently started discussions with Portland General Electric regarding improvements to the BPA Road transversing Forest Park. PF&amp;R is working to increase wildfire awareness for residents living within the WUI, unauthorized camping in our designated wildfire hazard zones poses an acceptably high threat of potentially catastrophic wildfire incidents. To mitigate this risk, PF&amp;R is working with stakeholders and community partners to develop a procedure to relocate unauthorized campers from high-risk wildfire hazard areas.</p> <p>PF&amp;R continues to work with Portland General Electric and the Bonneville Power Administration on fire prevention issues for fuels mitigation and defensible space around transmission lines and electrical substation. PF&amp;R also continues to work with gas utility, Kinder-Morgan, on prevention activities as they conduct repair and maintenance on their gas transmission line through Forest Park.</p>	Ongoing	Ongoing

<b>WILDFIRE</b>	<b>No.</b>	<b>Action</b>	<b>Bureau(s)</b>	<b>Progress in FY 2022-23</b>	<b>Status</b>	<b>Finish Date</b>
	<b>W-2</b>	<p>Begin to build a Wildfire Prevention Program to coordinate with state and county wildfire planning, update Portland’s Forested and Wildland Interface Areas Fire Protection Plan, and seek grant funding to implement the plans to help make Portland more resilient.</p> <p>The work will include an evaluation of the wildland interface areas to identify the specific hazards that increase the threat of wildfire and provide mitigation strategies to address these concerns.</p>	<p>PF&amp;R            PBEM            PP&amp;R            BPS            PP&amp;D</p>	<p>PF&amp;R applied for the FEMA Fire Prevention &amp; Safety Program Grant on April 7, 2024, to obtain funding to reduce the risk of wildfire on Firewise community members properties. The focus is to reduce invasives and remove debris to create defensible space through contracted work. This is in alignment with both the state and county wildfire protection plan.</p> <p>PF&amp;R also worked with city, county, and state partners to complete the Multnomah County Community Wildfire Protection Plan (CWPP). Continued work occurs collectively on the CWPP on a bi-annual basis</p> <p>PBEM, with support from PF&amp;R, led the work to repeal City Code 3.22.180 Forested and Wildland Interface Areas Fire Protection Plan, which is duplicative of PBEM’s existing Basic Emergency Operations Plan (BEOP) 2017 and 2021 Mitigation Action Plan (MAP). The repeal is planned to take place with the adoption of the latest update to the BEOP.</p> <p>PF&amp;R continues to partner with the Oregon Department of Forestry and the Oregon State Fire Marshal in evaluating areas at risk for wildfire that fall under PF&amp;R’s protection. Additionally, PF&amp;R worked with the Regional Disaster Preparedness Organization, utilizing FEMA grant funds, to produce a Wildland Fire Risk Assessment Report and Gap Assessment across Multnomah, Clackamas, Washington, Columbia, and Clark Counties.</p>	Ongoing	22-23

HEALTH IMPACTS - HEAT AND SMOKE	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	<p><b>H-1</b></p>	<p>★ Reduce indoor health impacts.</p> <p>Implement PCEF heat response program distributing 15,000 efficient heat pump cooling units to vulnerable Portlanders</p> <p>Upgrade HVAC systems in PP&amp;R community centers and other community spaces that can serve as cooling spaces and clean air spaces during heat emergencies. Provide resilient power to ensure continued operations in an emergency. (See East Portland Community Center pilot project.)</p> <p>Monitor and analyze temperatures inside some buildings to better understand the relationship between outside temperature and inside temperature based on conditions such as landscaping, construction type, resident practices.</p> <p><b>PCEF</b></p>	<p>BPS (PCEF) PP&amp;R PBEM</p>	<p>PCEF’s Cooling Portland program has exceeded its two-year installation goal. The program’s goal is to install 15,000 units by the end of 2027 through partnerships with community-based organizations and housing providers.</p> <p>PCEF’s RFP 2 grant funding will install about 1,700 heat pumps, including a 30% allowance for health safety measures, for over 1,800 affordable multifamily homes, 700 single family homes and 5 nonprofit commercial buildings. PCEF has funded upgrades in 343 homes, of which 232 have mechanical system upgrades, which are primarily heat pump installations.</p> <p>\$30 million is allocated for building upgrades for community severe weather response that improve resilience and continuity of service of sites that provide critical services during severe weather-related events in event of a major power outage. An additional \$6.2 million is funding efficiency and resilience measures at Mt. Scott Community Center.</p> <p>Three community center HVAC upgrades are moving to detailed design and on to construction through an Energy Savings Performance Contract; however, a FEMA grant application to fund solar and battery backup for East Portland Community Center was not successful.</p> <p>The second phase of indoor temperature monitoring was concluded, and the final report was published in May 2024.</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p><b>H-2</b></p>	<p>Reduce outdoor workers’ health impacts.</p> <p>Maintain extreme heat and wildfire smoke protocols for outdoor workers.</p>	<p>PWB PP&amp;R BES PBOT PP&amp;D BHR BRFS (City Risk) PF&amp;R</p>	<p>Bureaus continue to implement state-mandated heat and wildfire smoke rules to provide shade, hydration, rest breaks, air quality information, respirators, and associated trainings.</p> <p>BES is incorporating the new permanent Oregon OSHA rules related to extreme heat and smoke workplace safety into training, practices, and protocols, especially for its outdoor workforce. Annual heat and wildfire smoke trainings are also now mandatory for all BES employees. General Construction Safety Provisions were updated to include the OSHA provisions as well, so our contractors are compliant.</p>	<p>Ongoing</p>	<p>Ongoing</p>	

RESILIENCE HUBS	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	RH-1	<p>★ Convert East Portland Community Center into an energy efficient, resilience center for extreme heat, smoke, ice, extreme cold, power outages and other disasters.</p> <p>Begin HVAC upgrades in FY22-23, with other work continuing beyond the 3-year timeline of this Workplan, if funded. Use the pilot work to expand improvement to all five large community centers.</p>	<p>PP&amp;R</p> <p>PBEM</p>	<p>ree Community Center HVAC upgrades are moving to detailed design and on to construction through an Energy Savings Performance Contract. Attempts to acquire a FEMA grant to fund solar and battery backup for East Portland Community Center were not successful.</p>	Ongoing	Ongoing
RH-2	<p>★ Develop neighborhood-scale energy resilience through solar + battery systems.</p> <p>Work with the community and other bureaus and agencies to prioritize facilities that are essential to the City or the community. Prioritize installations in neighborhoods that serve communities facing the greatest risks.</p> <p><b>PCEF</b></p>	<p>BPS</p> <p>PBEM</p> <p>PP&amp;R</p>	<p>The Portland Clean Energy Community Benefits Fund (PCEF) has allocated \$6.2 million for resilience measures at Mt. Scott Community Center, including solar generation and battery storage. The project is expected to be completed in 2025.</p>	Ongoing	<p>23-24</p> <p>24-25</p>	

★ - Maps to Climate Emergency Declaration, 100% Renewable Energy Resolution, or 2035 Comprehensive Plan

PCEF - Denotes Portland Clean Energy Community Benefits Fund Investment (PCEF)

INFRASTRUCTURE PLANNING & CONSTRUCTION	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	IP-1	★ Incorporate climate change information (i.e. flood risk, extreme heat, drought) in capital planning and infrastructure design.	BES PWB PBOT PP&R	<p>PWB implemented a new process to embed climate-smart considerations (i.e., energy savings, low-carbon materials, internal cost of carbon analyses, and heat/flood/landslide/fire/drought adaptation strategies) into Engineering Planning Project Validation and Design processes for capital and operational maintenance projects. This includes checklists for engineering project managers to evaluate climate risks and hazards to water system assets and infrastructure, as well as suggested climate adaptation and mitigation strategies.</p> <p>BES has incorporated climate change storms into multiple projects and is awaiting completion of a systemwide model for further application. A draft BES Climate Change Resilience Policy has been developed and is proceeding through an adoption process. BES is also a partner in EPA's Climate Finance Workgroup to guide what climate risk disclosures for wastewater/stormwater utilities may look like for credit rating agencies and insurers.</p> <p>PBOT looks forward to working with the other public works bureaus to better understand and incorporate climate-smart investment, construction and materials best practices and implementation strategies.</p>	Ongoing	Ongoing
IP-2	Complete the identified improvements needed to avoid landslides throughout the West Burnside Road right of way.	PBOT BES PP&R	This is an unfunded initiative. PBOT continues to monitor infrastructure improvement grant opportunities to fund planning efforts, and BES continues to support this effort.	Delayed	Five Year Capital Project (Design to Construct)	



EMERGENCY PLANNING	No.	Action	Bureau(s)	Progress in FY 2022-23	Status	Finish Date
	E-1	<p>★ Continuity of operations actions.</p> <p>Invest in equipment to keep modes of transportation in operation during extreme weather events.</p> <p>Purchase, install, and operationalize a prioritized list of equipment to enable modes of transportation to continue during extreme weather events, including snow/ice, intense rain/flooding, heat, and smoke events.</p>	<p>PBOT</p> <p>PP&amp;R</p> <p>BES</p>	<p>This is an unfunded initiative; however, PBOT can respond to most emergencies with existing equipment. Funds for additional floodwall materials such as Muscle Wall technology would be welcome for river flooding. PBOT staff are working together to determine funding sources and write applications for this type of resource through our grants team.</p> <p>BES is updating its O&amp;M snow and ice plan to include a bureau-wide plan with more specification. This plan includes a review schedule and a tabletop exercise to test and train around the requirements within the plan.</p>	Ongoing	23-24
	E-2	<p>Emergency response preparation.</p> <p>Invest in equipment to improve the city's ability to respond to emergencies during extreme weather events.</p> <p>Purchase and operationalize prioritized list of equipment to improve the city's ability to respond and manage destruction due to extreme weather events.</p>	<p>PBOT</p> <p>PP&amp;R</p> <p>BES</p> <p>PWB</p>	<p>Citywide funding for this work has not been identified and could be considered in the future. Minor projects completed by various bureaus are described here instead.</p> <p>PWB increased the overall resilience for bureau response to emergency events by replenishing 72-hour employee emergency supply kits and purchasing additional handheld radios for use in the Bull Run Watershed. This will improve capabilities of employees and contractors to notify others of dangers like wildfires and weather events. During the Camp Creek Fire in August 2023, PWB updated multiple response plans, including an emergency drinking water distribution plan to be used in the event of an extended boil water notice. The needs of vulnerable populations were carefully considered.</p> <p>PBOT replenished emergency kits, or "red bags," for downtown staff in September 2023 and is working to update bags for vehicles and Kerby Campus staff. They are also working on funding for radios and additional materials and equipment.</p> <p>BES O&amp;M is purchasing a snowplow attachment for snow clearing at the main treatment plant. BES Emergency Management is working on a Damage Assessment Plan to include the placement of six DAT trailers throughout the city.</p>	Ongoing	23-24
	E-3	<p>★ Continuity of operations actions.</p> <p>Draft or revise essential emergency and continuity of operations city &amp; regional plans, including a short-term climate change emergency response plan.</p>	<p>PBEM</p> <p>PBOT</p> <p>PP&amp;R</p>	<p>PBOT Emergency Managers are updating the PBOT Continuity of Operations Plan (COOP), working with PBEM and the Public Works bureaus; however, work is delayed due to software issues. PBOT is requiring all staff listed on the Winter Weather Organizational Chart for FY 2023-24 to take the first four levels of Incident Command Structure (FEMA) training to best respond to emergencies.</p>	Ongoing	23-24

<b>EMERGENCY PLANNING</b>	<b>No.</b>	<b>Action</b>	<b>Bureau(s)</b>	<b>Progress in FY 2022-23</b>	<b>Status</b>	<b>Finish Date</b>
	E-4	<p>★ Increase climate resilience awareness regionally.</p> <p>Benchmark &amp; integrate climate resilience with the greater Pacific Northwest Regional Area to help shape &amp; implement climate challenges, adaptivity and resiliency.</p> <p>Work with people who have historically been economically disadvantaged, or negatively impacted by service levels, projects, and geographic locations to collaboratively improve the region's resilience by building adaptive capacity &amp; expertise, as well as establishing levels of services and expectations during severe weather events.</p>	<p>All Infrastructure Bureaus</p> <p>PBEM</p> <p>PWB</p> <p>BES</p> <p>PBOT</p>	<p>The Water Bureau partnered with the Water Utility Climate Alliance and US Water Alliance to develop water sector case studies of climate resilience and climate equity. These efforts included the development of equitable climate action case studies with information on a data-driven approach to incorporating equity. These approaches are shared locally and nationally as leading examples of this work.</p> <p>PWB also represented the City at the first White House Summit on Building Climate Resilient Communities in September 2023. PWB staff shared lessons learned in support of the federal administration's National Climate Resilience Framework, a vision for a climate resilient nation that impacts all geographic regions and economic sectors, while ensuring efforts to build climate resilience are centered on people, equity, and justice.</p> <p>PBOT Emergency Management Staff continues to work with area partners to serve communities with disadvantages during emergencies and participate in evacuation plan updates including tabletop exercises focused on evacuation of these communities. The 2023 Regional Transportation Plan led by Metro also expanded the Climate Leadership Goal to incorporate climate resilience. In addition, Metro is initiating Phase 2 of the Regional Emergency Transportation Routes in 2024, with participation from PBOT and PBEM to identify prioritization of routes and operational strategies.</p> <p>BES is a partner in multiple regional and national collaborative research and coordination groups. BES also partners with EPA on two climate-related initiatives.</p>	Ongoing	Ongoing

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