

ATTACHMENT C

Summary of Metro's Climate Work

I. Introduction

In 2008, Metro adopted six desired outcomes for the region, one of which is leadership in addressing climate change. Metro has advanced this outcome in all of its public service lines: planning, development and research; parks and natural areas; garbage and recycling; visitor venues; and housing. Metro has also demonstrated climate leadership in government affairs and regional coordination, internal business operations and economic development. As Metro's climate leadership evolves, new opportunities are emerging for meaningful and equitable climate action.

Climate action is any action intended to reduce the occurrence or impacts of climate change. These actions take many different forms and have shifted focus over time. Climate justice and resilience encompasses a transformational approach to climate change that addresses the root causes of climate change, centers the voices and priorities of those most impacted, and seeks solutions that amplify the transition to a just and equitable future and reduce vulnerabilities to the environmental, social, and economic impacts of climate change.

The purpose of this document is to summarize the climate work that Metro has done throughout its history as an agency for Metro's Climate Justice and Resilience Task Force. It is organized by the following sections: overarching policies and commitments; regional services; government affairs and regional coordination; internal business operations; and economic development.

II. Documents guiding Metro's climate action

Metro has made commitments related to climate change that inform our climate policies and actions across our service lines. The Metro Vision and [Six Desired Outcomes](#) state:

- "People live, work and play in **vibrant communities** where their everyday needs are easily accessible.
- Current and future residents benefit from the region's **sustained economic competitiveness and prosperity**.
- People have **safe and reliable transportation choices** that enhance their quality of life.
- The region is a **leader on climate change**, minimizing contributions to global warming.
- Current and future generations enjoy **clean air, clean water and healthy ecosystems**.
- **Equity** exists relative to the benefits and burdens of growth and change to the region's communities."

This vision is given direction through the [Strategic Framework](#), which explicitly calls out racial justice, climate justice and resilience, and shared prosperity as guiding principles. Metro has also adopted a climate goal for internal business operations to reduce direct and indirect greenhouse gas emissions to 80% below 2008 levels by 2050.

Metro's commitment to racial equity, diversity and inclusion also informs climate justice work. The 2016 [Strategic Plan to Advance Racial Equity, Diversity, and Inclusion](#) identifies five goals, all of which have implications for Metro's approach to climate justice.

III. Regional services

Metro's regional services all address climate action in some manner, including planning, development and research, parks and natural areas, garbage and recycling, housing and visitor venues. Some of this work has been explicitly focused on climate, while other work may have climate implications without specifically stating that as a goal.

a. Planning, development and research

Metro's land use and transportation planning has long had climate mitigation benefits. In 2009, the State of Oregon directed Metro to develop and implement a regional strategy for reducing greenhouse gas emissions from transportation, specifically from cars and small trucks. The [Climate Smart Strategy](#) was adopted in 2014 and outlines nine strategies to reduce regional per capita emissions by 29 percent from 2005 levels by 2035. The strategy also has implementation recommendations for all forms of government in the region. Metro has continued to work with partners to implement the **Climate Smart Strategy** through the following actions:

- [Region 2040 Growth Concept \(1995\)](#), a land use and transportation plan for the greater Portland area intended to manage growth and build vibrant communities and job centers. Since 1995, cities and counties across the region have updated their comprehensive plans, development regulations and transportation system plans to implement the 2040 Growth Concept vision in locally tailored ways. The 2040 Growth Concept and adopted local plans provided the foundation for the Climate Smart Strategy.
- [Regional Transportation Plan](#) (RTP), the long-range transportation plan that guides planning and investments for all forms of travel and the movement of goods and services for the greater Portland area. The plan includes policies and investments related to walking, biking, transit, transportation safety, freight, transportation demand management and technology, all of which are outlined in the CSS. Greenhouse gas emissions and implementation of the CSS are specifically analyzed as part of updates to the plan every five years. Work is underway to improve Metro's climate modeling tools and methods as part the 2023 RTP update.
- Implementing the [Regional Travel Options Grant Program](#) to provide funding to support projects and programs that educate and encourage people to increase their use of travel options. Travel options include any mode of transportation besides driving alone – carpooling, vanpooling, riding transit, bicycling, walking, rolling, shared mobility and telecommuting, all of which are outlined in the CSS and are an important component of reducing greenhouse gas emissions. The grant program implements the RTP, Climate Smart Strategy and [Regional Travel Options Strategy](#) adopted by the Metro Council in 2018. (2018-ongoing)
- Implementing the [2040 Planning and Development Grant Program](#) to provide funding for local planning projects and activities that help remove barriers to private investment, make land

ready for development and help implement the 2040 Growth Concept and Climate Smart policies and actions in local plans. (2015-ongoing)

- Using the [Transit Oriented Development Program](#) to provide funding to stimulate private construction of multi-unit and multi-family housing, affordable housing and mixed-use projects near transit to help implement the 2040 Growth Concept and Climate Smart Strategy. The program also invests in "urban living infrastructure" like grocery stores and other amenities and provides technical assistance to communities and developers. (1996-ongoing)
- Prioritizing funds allocated through the [Regional Flexible Fund Allocation Process](#) towards more effective Climate Smart investments, including make the most of our existing roads and transit, bike and pedestrian safety retrofits and complete street designs, and expanding high capacity transit and enhanced transit service. (2015-ongoing)
- Monitoring and assessing the region's [air quality](#). (ongoing)

In addition, Metro provides transparent, accessible data related to the six desired outcomes using the [Regional Barometer](#). The barometer includes data related to equity, communities, economy, transportation, environment and climate. The climate and environment data measure air quality, toxics from the built environment, water quality, vehicle emissions and how our region is adapting to changes in climate.

b. Parks and natural areas

Metro's parks and natural areas absorb and sequester carbon from the air and provide refuge during extreme heat events. While natural areas have always had climate benefits, the 2019 Parks and Nature Bond explicitly identifies the role of parks and natural areas to increase climate resilience. It also advances Metro's commitment to racial equity, by ensuring all people benefit from investments in parks and nature. The voter-approved 2022 parks and natural areas levy includes further language around resilience, climate adaptation, equity and inclusion.

Regional role

Metro's parks and natural areas play a unique regional role in protecting and restoring water quality and wildlife habitat while advancing racial equity and providing equitable access to nature. Metro's growing portfolio of parks and natural areas includes significant regional anchor habitats and habitat corridors essential to climate change resilience. Parks and natural areas also absorb and sequester carbon, cool the air, attenuate flooding, and provide relatively cool, shaded places for residents to gather and recreate during times of extreme heat. This latter role is especially important in the urban area, where climate change effects are strongest in the historically least served communities such as those with urban heat islands where trees are lacking.

For example, Smith and Bybee Wetlands Natural Area encompasses more than 2,000 acres, captures and stores stormwater thereby lessening flood risks, is one of the largest urban freshwater wetlands in the US, includes a regional trail connecting to other natural areas, and is adjacent to one of Metro's Equity Focal Areas. In another example, Metro is partnering with the City of Portland to

protect and restore a critical property along Crystal Springs near Reed College that fills in a missing salmon habitat connectivity link; outreach to the Indigenous community identified this as a culturally important area. Metro has acquired many properties on the region's forested East Buttes, which provide the headwaters to Johnson Creek and support culturally important species such as salmon while reducing flooding in one of the region's most urbanized watersheds. Numerous Johnson Creek acquisitions also provide habitat, cool the air, comprise an important east-west wildlife corridor along the Springwater Corridor, and help conserve culturally important resources.

Ecosystem services

Ongoing habitat protection and restoration increases the amount of carbon sequestered in Metro's growing natural areas portfolio. Stream and wetland restoration protects drinking water, reduces flooding and increases groundwater recharge, which supports summer and fall base-flow and provides cool water for Salmon (and people) during summer. These human benefits from nature are termed "ecosystem services." Parks and natural areas improve human health and well-being, with benefits ranging from reduced blood pressure, spiritual experiences, promoting physical activity, experiencing good air quality, improved sense of place and belonging, improved cognitive function, stress reduction, and mental health. Cooler air provided by natural areas reduces energy consumption. Inequitable access to parks and natural areas deprives people of color and low-income communities of these and many more ecosystem services. Metro is working to help correct that.

2019 Parks & Nature Bond

While natural areas have always helped moderate the region's climate and provide resiliency to climate change, the 2019 Parks and Nature Bond explicitly called out opportunities to increase climate resilience by emphasizing flood control, water quality and availability, urban forest canopy, habitat connectivity, food security and community access to water. The bond also advances Metro's commitment to racial equity by ensuring that all people benefit from investments in parks and nature. For the first time, the 2019 bond included an urban target area encompassing all lands within the Urban Growth Boundary, setting the stage to acquire specific parcels that can help both nature and the people who are currently least served in terms of access to natural areas.

Focused public outreach before, during, and after passage of the 2019 bond ensured that Metro heard from and incorporated the needs of some of the region's most underserved communities. Metro is acquiring rural and urban lands important to the Indigenous community and welcoming access to some sites including Traditional Ecological Knowledge, ceremonies, food gathering and more. Regional trail planners are considering Equity Focal Areas in their work. Metro is designing park infrastructure incorporating the specific input of BIPOC communities.

c. Garbage and recycling

Regional Waste Plan – reducing pollution from products the region makes, buys, uses and discards

As the regional solid waste authority, Metro facilitates the collection and treatment of the region's waste. In recognition that every product has impacts related to production, shipping, use and disposal, Metro's [2030 Regional Waste Plan](#) outlines ways to reduce climate and other pollution from each stage of an item's "life cycle". The plan focuses on reducing environmental impacts and improving services and economic benefits to communities of color and others. One of the values of the Regional Waste Plan is to "protect and restore the environment and promote health for all," including leading efforts to reduce impacts of climate change.

"Upstream" (extraction and manufacturing)

In this stage of the product life cycle, Metro's actions and opportunities are mostly in the policy arena. Policy tools like extended producer responsibility (EPR) make industry responsible for the costs and management of their products after use, which can drive companies to re-design their products with more attention to environmental considerations, including carbon intensity and recyclability. Examples of this include Oregon E-Cycles (electronics) EPR programs and similar programs in other states, Oregon Bottle Bill, PaintCare, and work to establish EPR for mattresses, household hazardous, plastic packaging and carpet.

"Mid-stream" (use)

Metro's work in the "use" part of a product's life cycle is primarily in education efforts, advocacy for transparency of product information and the power of the public purse. A few examples:

- Culturally responsive, co-created waste prevention and recycling educational programs like Trash for Peace, the regional Master Recyclers program and residents of Home Forward multifamily communities. This model is being replicated in Washington County.
- Age-appropriate and culturally responsive engagement on climate change and youth provided in middle and high schools across the region, including a new peer-to-peer program in which high school youth design and lead engagements with middle school students.
- Providing consumers with the tools and information to make informed decisions about climate impacts of their purchasing options.

"Downstream" (discards)

Continuing to recycle the right materials in the right way brings significant reductions in greenhouse gas pollution because recyclables replace petroleum in the manufacture of products. In addition, using recycled materials to make new products takes less energy than using mined or harvested materials. In 2021, material recovery in Oregon resulted in greenhouse gas pollution reductions of 3.2 million metric tons of CO₂ equivalent.

Progress results from a suite of policies and programs developed and implemented by Metro and cities and counties in the greater Portland region. These include: the recyclables collection services provided to every property and business; the Business Recycling Requirement implemented by Metro; the Recycling At Work technical assistance program provided by local governments and

supported by Metro; and comprehensive education programs like RecycleOrNot.org, the Recycling Information Center, and the tens of thousands of students, adults and families reached through in-person presentations, workshops and partnerships.

Food Scraps Policy

In recognition that food waste is the single largest component of garbage and has the biggest climate impact, the Metro Council adopted a [Food Scraps Policy](#) in 2018 that requires food service businesses to separate food scraps from other waste. These food scraps are used for compost and energy, diverting them from going into a landfill. The policy also supports food waste prevention and edible food donation. Implementation of this policy began in March of 2022.

Investment and Innovation Grants

Metro's Investment and Innovation Grants support businesses and non-profits involved in reducing waste through reusing, recycling, composting or making energy from greater Portland's waste. At the same time, the program helps foster economic opportunities and provides other benefits for people historically left out of the garbage and recycling system, particularly communities of color. Since 2018, Metro has awarded more than \$10.7 million in grants to local businesses nonprofit organizations, and colleges and universities in greater Portland.

Disaster debris

Climate disasters like wildfires and floods often result in disaster debris. Metro helps to contribute to climate resilience by supporting the region in planning for and responding to these debris events through the [Disaster Debris Management plan](#).

d. Visitor venues

Metro leads by example in its iconic visitor venues. Following are some highlights of climate mitigation work at Metro's visitor venues:

- In 2004, the Oregon Convention Center was the first convention center to earn the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) for Existing Buildings certification. In 2008, OCC achieved the Silver level. In 2014, OCC earned LEED® Platinum, the highest level of certification, making it one of only two platinum certified convention centers in the U.S. Oregon Convention Center has a 2-megawatt solar array on its roof, one of the largest solar power arrays on a convention center in the U.S. Its 6,500 solar panels produce 25-30 percent of the facility's electricity.
- The Portland Expo Center has the largest stormwater green wall in the country, treating more than 10,000 cubic feet of runoff annually. Expo has been making steady investments in energy efficiency.
- Conservation and education are in the Oregon Zoo's mission, which requires action on climate change. The Zoo is a leader in educational efforts that inspire people to make small changes

each day that benefit the environment for animals and people. The Zoo has been assisting the US Geological Survey with [research on the effects of Arctic bears' shifting diets](#). The Zoo campus includes projects that demonstrate climate friendly development practices. The Zoo Education Center won the TopProject Energy Trust High Performance Building Award from the Daily Journal of Commerce among other awards. Designed for net zero energy and LEED Gold certification, the Center includes more than 700 solar panels, LED lighting, high efficiency heating and cooling systems, rainwater harvesting, and salvaged building materials.

- Metro has made significant investments in energy efficiency at the Portland's Centers for the Arts, owned by the city of Portland, including replacing thousands of incandescent lamps with LEDs, and installing high efficiency heating and cooling systems.
- The Metro Visitor venues are members of The Wave Foundation NW that collaborates to accelerate environmental programs that address climate change, youth engagement and environmental justice.

e. Affordable housing bond and supportive housing services fund

Housing is a newer service area for Metro. While the 2018 affordable housing bond and 2020 supportive housing services fund did not include specific climate action language, they present an opportunity to reduce the impact of housing on climate, support resilient homes, and address injustices that underlie climate change and racial discrimination. After the 2021 heat dome event, Metro required housing units funded through the bond to include a cooling strategy to improve the climate resilience of residents, and has explored energy efficiency as another element, which would address both mitigation and resilience. The Albertina Kerr housing project in Gresham, funded in part from the housing bond, is the largest net-zero energy affordable housing project in the Pacific Northwest, producing enough renewable energy from its solar array to fully operate the building and eliminating utility costs for residents.

IV. Government affairs and regional coordination

State legislative advocacy

Metro advocates for state legislative issues that align with its values and desired outcomes within its legislative purview. Metro has advocated state legislative initiatives and administrative rules to advance climate in Metro's main lines of business. This has included efforts like cap and trade, housing policy changes and investments to deal with extreme heat, electric vehicles and waste reduction. Metro's advocacy will continue in future legislative sessions, guided by the leadership of the elected Metro Council.

The Metro Council adopts legislative principles every year to guide its advocacy work, which have addressed climate change specifically in many years. The 2023 principles state that "Metro supports efforts to combat and adapt to climate change and to meet the state's goals for reducing greenhouse gas emissions. To this end, Metro supports state policy and funding solutions that can help to reduce emissions in all of its main lines of business: land use and transportation planning

and investment, housing and homeless services, solid waste management and prevention, parks and natural areas, and operation of visitor venues.” More specific principles look at climate mitigation (explicitly or within the broader category of environmental impacts) within solid waste and transportation. Disaster preparedness is another specific principle, which can include climate resilience action, though that is not explicitly included in the adopted language.

Federal advocacy

Metro’s federal affairs work also includes advocacy for policies and funding to mitigate and adapt to climate change. The most recent federal legislative principles, adopted by the Council in early 2022, include a principle entitled, “Tackle climate change, restore climate integrity”, which states: “Metro supports aggressive efforts, policies, and bold investments to combat and adapt to climate change and to reduce greenhouse gas emissions at the local, regional, state, national, and international levels. Metro advocates for policies, programs, and projects that incentivize or require greenhouse gas emissions reduction, advance planning efforts to reduce greenhouse gas emissions and support climate adaptation, and facilitate data collection to improve climate and air pollution monitoring. Metro also supports policies that use possible revenue from carbon reduction fees to support family wage jobs, job training, transportation investments that reduce greenhouse gas emissions, and climate pollution mitigation programs.” Specific climate-related federal actions for which Metro has advocated include transportation and infrastructure funding, funding and policies for species and habitat conservation, and investments in disaster preparedness. In 2022, Metro secured a \$2 million earmark to modernize the Oregon Zoo’s condor breeding facility to better withstand local climate change impacts.

Tribal Affairs

Metro engages with sovereign Tribes throughout the Pacific Northwest to discuss broad climate goals and actions as well as specific projects and plans that impact Tribal resources or concerns. Climate impacts and resilience are frequent topics of conversation with Tribal partners, whose communities, culture, and sacred places are disproportionately threatened by climate change. Several Tribes in the region also have explicit climate adaptation/resilience plans and policies, which they have shared with Metro with the desire that Metro work to align its cross-agency understanding, priorities and practices with Tribal needs and interests.

Convenor

Metro also has a formal role as a regional convener in many areas. Around sustainability and climate, Metro has supported, led and participated in the Public Sector Sustainability Roundtable, a network of sustainability professionals in the region.

Emergency Planning

Metro collaborates with the Regional Disaster Preparedness Organization (RDPO) on emergency planning. Metro led the creation of a social vulnerability toolkit for the 5-county RDPO region. This

toolkit improves upon more generalized social vulnerability data to allow emergency planners to gain an understanding of the equity issues in the region and apply them to planning, response, and recovery efforts.

V. Internal business operations

Metro's operations represent the area where the organization has the most control. Leading by example is an important way Metro can advance climate justice and resilience in how we conduct business and build, operate, and manage Metro properties including visitor venues, the Regional Center, garbage and recycling facilities, and parks and natural areas. The Metro Council adopted five sustainability goals for internal operations in 2003, and a [Sustainability Plan](#) in 2010 that identifies strategies and actions to meet Metro's goals for climate, toxics, waste, water, and habitat.

Climate goal

Metro's climate goal calls for an 80 percent reduction in greenhouse gas emissions below 2008 levels across operations by 2050. According to Metro's last greenhouse gas inventory completed for FY2016-17, Metro has decreased operational greenhouse gas pollution by nearly 46 percent, ahead of the 2025 target. Progress to date has largely been due to energy efficiency initiatives, the purchase of renewable energy and the transition to low carbon fuels.

Capital assets and buildings

As part of Metro's Capital Asset Management Policy and capital planning process, all new capital project requests are required to evaluate alignment with Metro's leadership goals including racial equity and climate justice and resilience.

Metro adopted a Green Building Policy in 2011 shortly after adopting the Sustainability Plan. In 2022, Council adopted an updated Sustainable Buildings and Sites Policy to better align with Metro's climate justice and resilience and racial equity values. This policy includes green building certifications and requirements that address the key climate and racial justice issues related to the built environment, including reducing energy use and embodied carbon, requiring 100 percent renewable energy for all Metro sites, reducing urban heat island effect, shifting toward building electrification, requiring meaningful and inclusive engagement on projects, and advancing workforce diversity and equity in contracting.

Sustainable purchasing

Metro's largest source of emissions is its supply chain, where Metro can leverage its purchasing power to have significant impact. In 2012, Metro adopted the Sustainable Procurement Administrative Procedure to "ensure that Metro's procurement activities meet the sustainability definition and goals adopted by the Metro Council; and support a sustainable environment, economy and community by reducing the environmental impact of Metro government operations, supporting local businesses and ensuring diversity in Metro's procurement efforts." Metro has initiated an update to the Sustainable Procurement Admin Procedures to reflect Metro's values and

current best practices. Metro is pursuing initiatives to address the largest sources of supply chain emissions, including embodied carbon in building materials, upstream emissions from energy production, food purchased for Metro’s visitor venues and operating supplies.

Diesel pollution and black carbon

Metro is also working to reduce diesel pollution from construction projects, which is a significant climate and environmental justice issue. Diesel pollution threatens the health of people living and working in the greater Portland area, with a disproportionate impact on BIPOC and low-income communities. Diesel exhaust is also a significant source of black carbon, a potent but short-lived global warming pollutant.

Metro worked with a collaboration of local agencies to develop a regional standard to reduce diesel pollution from public construction projects. The [Clean Air Construction Standard](#) requires idling reduction and phases in requirements for emissions controls or alternative fuel sources for diesel construction equipment and vehicles. Metro adopted the Clean Air Construction Standard in July 2020, which applies to all construction contracts \$500,000 or greater. The regional program provides assistance to COBID and small firms including free engine retrofit assessments and fleet compliance plans, and support for applying for DEQ and EPA diesel grants. A small grant program for COBID and small firms is also under development.

Other programmatic efforts

Across Metro buildings and sites, various programmatic efforts address climate by:

- Reducing energy use in buildings through tracking and reporting utility use across facilities and pursuing opportunities for **energy efficiency** significant investments in LED lighting, and efficient heating and cooling systems, submetering and other efficiency initiatives. Metro has also participated in Energy Trust of Oregon’s Strategic Energy Management program.
- **Switching fleet and operations to low carbon fuel** including electric vehicles and bio-based renewable diesel at the Oregon Zoo, parks, and transfer stations.
- **Investing in electric vehicle infrastructure, vehicles, and equipment** including installing electric vehicle charging infrastructure for Metro’s fleet and employee vehicles at the Regional Center and for 20 fleet trucks at the Borland Native Plant Center, pursuing an electric-first approach to fleet vehicle procurement, and purchasing and requiring electric landscaping equipment for operations.
- **Generating and supporting renewable energy** including producing approximately 10% of Metro’s annual electricity use onsite through solar arrays at the Oregon Zoo, OCC, and several parks, subscribing to Oregon community solar projects and pursuing opportunities to host community solar projects, and transitioning to 100 percent renewable energy at all Metro facilities.

- **Improving resilience** through planning for continuity of operations and response to disrupting events, including those exacerbated by climate change. Coordination and engagement between departments has also allowed Metro to gain better understanding of hazards and their forecasted impacts to facilities, employees, and customers. Implementing resilience throughout plans such as the Regional Waste Plan, Regional Transportation Plan, and the currently underway Garbage and Recycling Regional Facilities Plan are all examples of how understanding the hazards in our region can better position us to advance future climate resilience efforts.

VI. Economic development

Climate justice goes beyond technical changes to look at underlying systems, including the economy. Metro invests in economic development activity across the region and can explore ways that restores and sustains a healthy environment and livable communities instead of driving extraction. Metro also leads the development of the region's [Comprehensive Economic Development Strategy](#) (CEDS) with Greater Portland, Inc. This strategy specifically calls out equity, sustainability, and resilience.

VII. Workforce Equity

Metro is implementing several departments and agencywide strategies that advance workforce equity. For example, the Oregon Zoo and Parks and Nature have developed programs that create pathways for underrepresented community members to find employment in conservation fields. As a part of the Regional Waste Plan, WPES has made investments and developed programs addressing the barriers BIPOC individuals face in accessing the economic benefits created by the garbage and recycling system. Through Construction Career Pathways, Metro is advancing a comprehensive policy strategy to create career pathways for BIPOC and women workers in the construction industry that is being implemented by nine agencies across the region. Metro is exploring opportunities to build on these efforts with a focus on creating good family sustaining green/climate jobs with career pathways and collaborate to leverage the collective efforts of departments and regional partners.