



Metro



Sustainability report

FY 2018-19

December 2019

oregonmetro.gov

If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we’ve already crossed paths.

So, hello. We’re Metro – nice to meet you.

In a metropolitan area as big as Portland, we can do a lot of things better together. Join us to help the region prepare for a happy, healthy future.

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Introduction

We are leaders in demonstrating resource use and protection in a manner that enables people to meet current needs without compromising the needs of future generations, and while balancing the needs of the economy, environment, and society.

- Metro value of sustainability

As a regional government committed to promoting sustainable communities, Metro also strives to make its own operations sustainable. This report describes efforts in fiscal year 2018-19 toward achieving Metro's internal sustainability goals for business operations at the agency's visitor venues, theaters, parks, office buildings and solid waste facilities.

In 2003, the Metro Council set an ambitious target for internal operations to be sustainable within one generation. To this end, the Council adopted goals in five key categories, listed below. Metro established a baseline for these goal areas in 2008 when it established a coordinated sustainability program.

Metro's sustainability goals



Reduce carbon Reduce direct and indirect greenhouse gas emissions to 80 percent below 2008 levels.



Choose nontoxic Eliminate the use or emissions of persistent bioaccumulative toxics (PBTs) and other priority toxic and hazardous substances.



Prevent waste Reduce overall generation of waste, and recycle or compost all remaining waste.



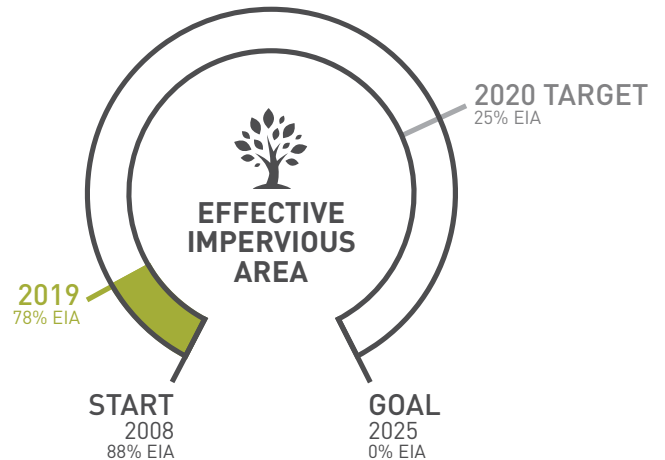
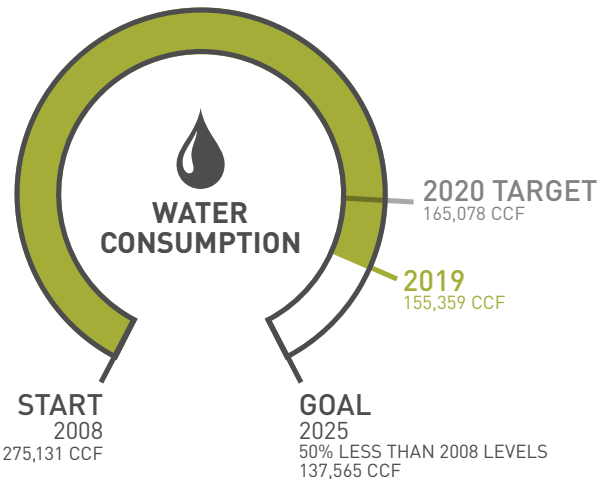
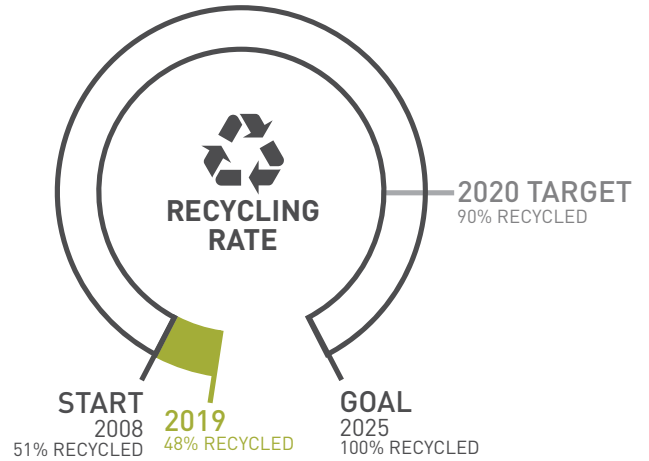
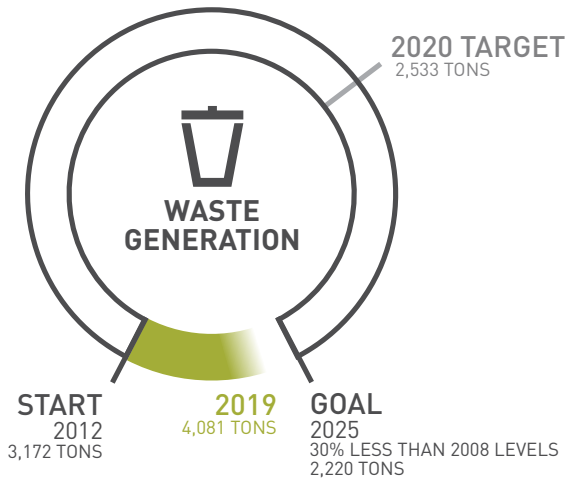
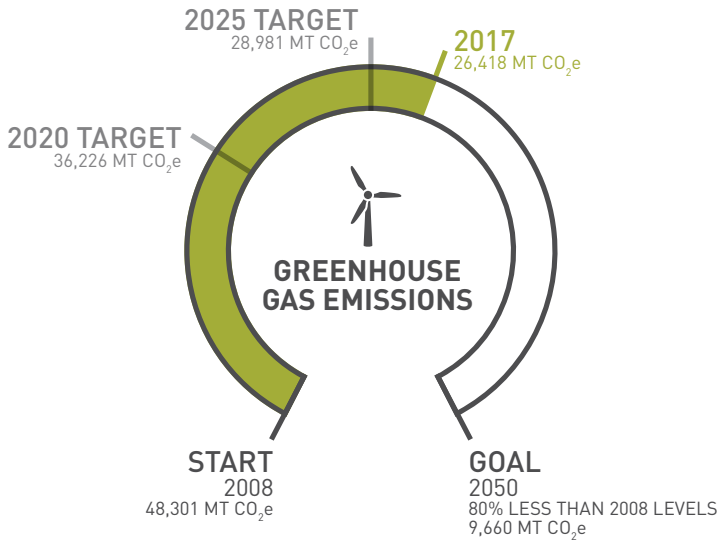
Conserve water Reduce water use to 50 percent below 2008 levels.



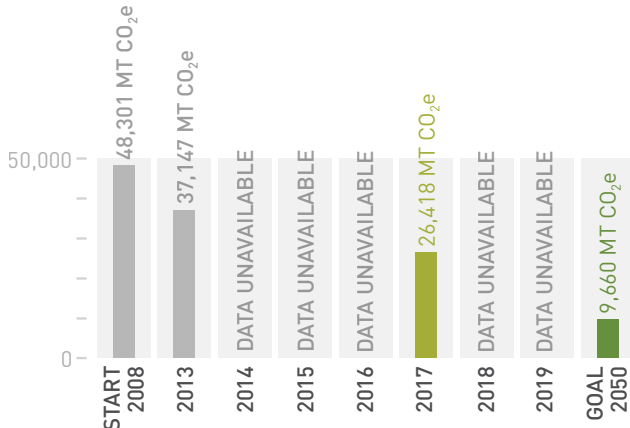
Enhance habitat Ensure that Metro's parks, trails, natural areas and developed properties support healthy, functioning ecosystems and watersheds.

Metro's *Sustainability Plan*, adopted by Metro Council in 2010, identifies strategies and nearly 100 actions to accomplish the above goals. The goals are to be achieved by 2025 or, in the case of greenhouse gas emissions, 2050. The plan and past years' progress reports are available online at oregonmetro.gov/greenmetro. The story of Metro's advancement towards these goals is told by data in key indicators and accomplishments across the agency. Both are included in this report.

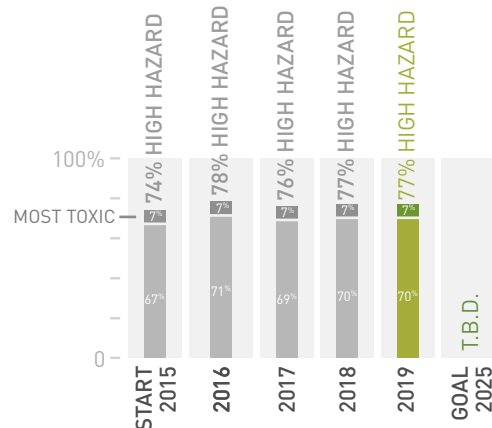
FY 2018-19 Sustainability scorecard



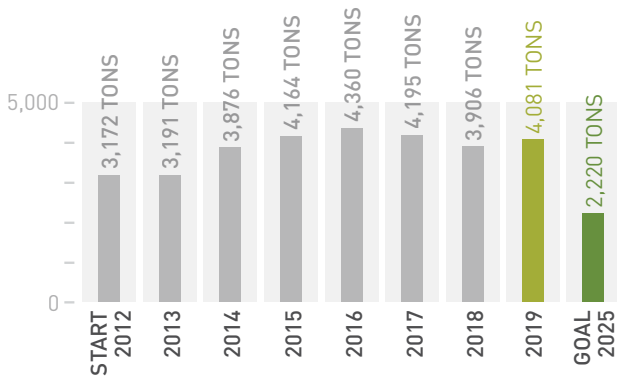
FY 2018-19 Sustainability scorecard



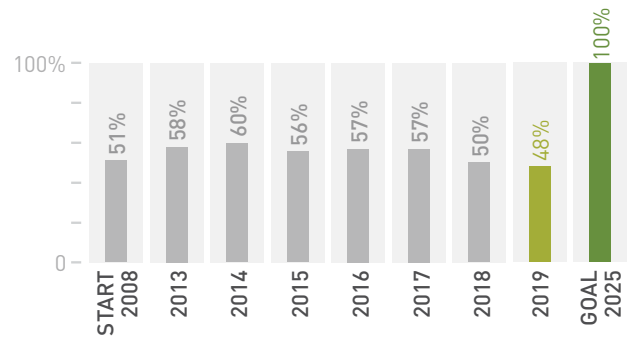
GREENHOUSE GAS EMISSIONS



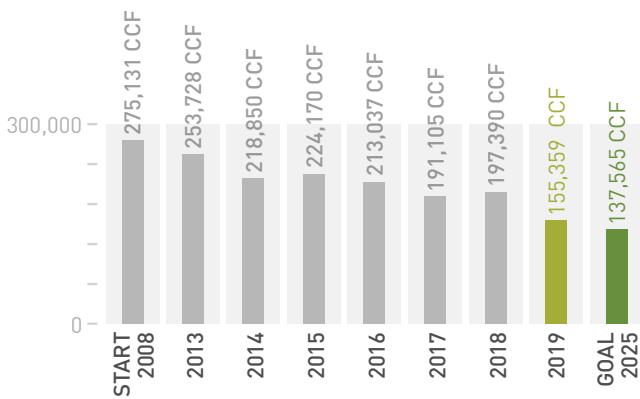
TOXIC INVENTORY



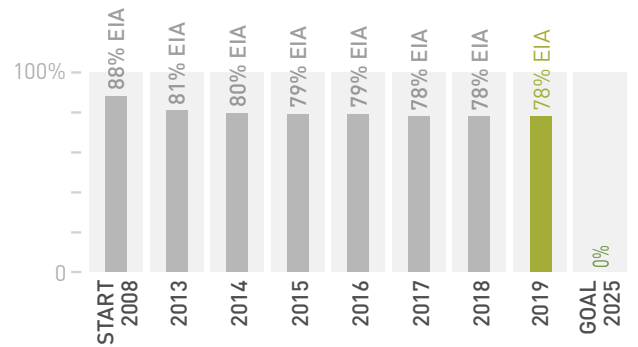
WASTE GENERATION



RECYCLING RATE



WATER CONSUMPTION



EFFECTIVE IMPERVIOUS AREA



PART 1: KEY ACCOMPLISHMENTS

Oxbow Welcome Center integrates sustainability and resilience

Incorporating sustainability and resilience were a primary design focus for the new, 2,600-square foot Oxbow Regional Park Welcome Center that opened in January 2019. Designed to serve as a gateway to the park while also remaining modest in scale and presence to respect its natural setting, the center welcomes visitors to the park and serves naturalist programs, volunteers and outdoor school groups.

While solar power was not an option at this site due to the extensive tree canopy, the building was designed to take advantage of passive solar and natural ventilation to minimize the need for mechanical heating and cooling systems. The building's orientation, large glazed areas and clerestory allows extensive natural lighting, while operable windows and vents, large eave overhangs and ceiling fans maximize natural ventilation and cooling. The highly insulated building envelope, high efficiency heat pump and LED lighting also reduce energy use. The project was also designed for durability and minimal material use, including extensive use of reclaimed wood, concrete floors and recycled MetroPaint. Interpretive elements are incorporated throughout to highlight Oxbow Park's plants and animals through etchings in the concrete, wood panels, steel gates and other architectural features.

Expo Center and Oregon Zoo invest in water efficiency

Water efficiency upgrades at both the Oregon Zoo and the Expo Center will help Metro achieve its goal to use 50% less water by 2025, compared to the 2008 baseline. The Expo Center has been steadily investing in water efficiency upgrades over the past few years, including automatic sinks and water efficient plumbing fixtures. To pinpoint where additional water savings can be realized, staff have also been employing portable water meters to track water use.

At the Oregon Zoo, the newly formed Green Team partnered with the Horticulture team to upgrade the oldest irrigation controllers at the Zoo, and added rain sensors to all of the controllers. The rain sensors will automatically shut off the irrigation system if moisture is detected, ensuring that no irrigation will happen when it's raining. The new controllers can also fine tune the watering schedule and create detailed reports about water usage. This will allow staff to quantify water savings and compare water use year-to-year to make informed decisions about additional water saving opportunities.

Oregon Convention Center recycles 110 tons of old carpet



It takes a lot of energy to produce carpet, and recycling opportunities are sparse, resulting in most carpet ending up in landfills. Over four billion pounds of carpet enter the solid waste stream in the United States every year. With new carpet going in as part of the Oregon Convention Center renovation project, Sustainability Coordinator Ryan Harvey saw an opportunity to reduce the climate and landfill impacts of the old carpet, working diligently to ensure that 110 tons of the old carpet were kept out of the landfill and put to good use. The carpet padding will be made into new padding. The carpet itself was sent to Washington, where the fibers will be used to filter waste water coming out of cargo ships to clean it before it reaches Puget Sound.

The new carpet, made of 53% pre-consumer recycled content, was installed as tiles, which allow for easy replacement. It is designated as “Red List Free” by the International Living Building Challenge, meaning that does not contain any of the “worst in class” harmful materials in the building industry, and also meets the Green Label Plus threshold for very low volatile organic compounds (VOC) emissions. When the new carpet has reached the end of its life, it will return to the manufacturer as part of a carpet recycling program.



Parks and Nature grow culture with Metro Regional Center backyard habitat project

Parks and Nature crews braved the snow on two separate days to create a small habitat patch outside the south entrance of the Metro Regional Center, intended to serve as inspiration for creating stepping stones of habitat across our region through the Backyard Habitat Certification program.

A team of Parks and Nature employees removed ornamental flowers and installed about 1,000 Willamette Valley plants of 50 varieties, many of which were sourced from Metro's native plant center. The design, created by Senior Parks Planner Olena Turula, starts as a forest understory (think Forest Park) then moves into a Willamette Valley Prairie (think Howell Territorial Park) near the corner of NE Lloyd and NE Grand.

The project is a product of the Parks and Nature's staff collaboration team, which focuses on fostering a culture of employee empowerment, inclusion and collaboration by creating a welcoming forum for new ideas and recommendations that can reach across team lines.

Recycling at Portland's Centers for the Arts benefits students and the arts

Portland's Centers for the Arts (P'5) provided opportunities for 12,000 students at Title 1 schools to experience the arts by attending P'5 performances. P'5 paid all costs related to the shows, including transportation for the students. The Portland's Foundation helped cover these costs through donations.

In early 2019, the Foundation started participating in the Bottle Drop Give Project. Instead of recycling bottles through the waste provider, P'5 event custodians collect the bottles and place them in pre-labeled blue bags. Twice a month the bags are dropped off at the designated bottle drop center. Instead of the traditional cash redemption, the money is deposited directly into the Portland's Foundation account. During the first 2 months the plan was in place, the P'5 Event Custodians raised \$210 for the students.





Metro's Household Hazardous Waste operations invest in sustainable operations

Beyond what they already did to ensure that hazardous waste was disposed of properly, employees at Metro's Central Household Hazardous Waste facility recently made changes to improve the sustainability of their operations. They replaced all of the old fluorescent lighting with LEDs, with an expected savings of \$35,000 in energy costs over 15 years. In addition to the energy savings, staff immediately noticed the improved quality of light from the brighter LEDs. Other improvements included replacement of the break room refrigerator with a new, energy efficient model, and increased use of video conferencing instead of driving to meetings at Metro Regional Center, saving both greenhouse gas emissions and valuable employee time.

Household hazardous waste staff also found a way to green the popular community hazardous waste collection events. In the past, customers waited in long lines with their cars running to drop off hazardous materials. Now, customers park while they wait their turn. With up to an hour or longer wait times at the events, averaging about 250 vehicles per event, this practice will prevent thousands of hours of idling and the resulting air and climate pollution every year.

Integrated pest management at the Zoo helps Zoo animals and wildlife

At the Oregon Zoo, an initiative to reduce the use of rodenticides has resulted in animal welfare benefits and also strengthened the Zoo's approach to Integrated Pest Management. Removing a highly effective but toxic form of rodent control spurred creative and collaborative approaches to keeping pest populations numbers in check. For instance, the custodial team switched to pulling garbage in the evening rather than the morning to remove food sources. Food for animals and visitors now gets put into sealed containers. The Zoo maintenance team has taken an aggressive approach to prevent pests from entering buildings through the use of door sweeps, patching holes, filling gaps, and screening drains and openings. Staff meets with the pest control team weekly to target hotspots and create remediation strategies. With the reduction in rodenticides, staff have observed an increase in wildlife on Zoo grounds, including, raccoons, squirrels, ermine, owls, eagles, mountain beaver, coyote, and rabbits.



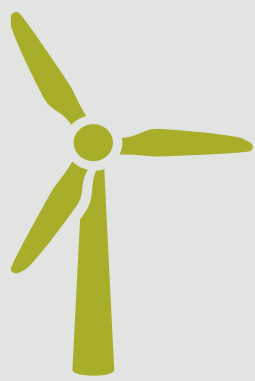
Green Teams take action across Metro

Green teams play an essential role in advancing sustainability and engaging employees across Metro's facilities. Green team projects in FY 2018-19 included:

- The Portland's Centers for the Arts Green Team created a brand new campaign, Waste Free Wednesday, in which staff were invited to take on new sustainable behaviors with the chance to earn prizes like bamboo sporks, cotton produce bags and gift certificates to vegan restaurants. The campaign culminated with an Earth Day celebration featuring a fully plant-based lunch.
- The newly invigorated Zoo Green Team initiated the creation of a Sustainability Plan for the Zoo, and invested in efficiency upgrades to the irrigation system, a water fountain for reducing single use plastics and dishwashers to increase the use of durable dishware.
- The Oregon Convention Center Green Team invested in 100 additional recycling containers to place at vendors' tables and in folding tables to use for sorting waste after events, as well as hosted events for Earth Month.
- The Metro Regional Center Green Team hosted a series of events for Earth Month, including lunch and learn events on climate friendly eating, waste reduction and naturescaping, ecofilm showings, e-waste and household goods donation events, and launch of a Waste Free Metro Regional Center Campaign.
- The Property and Environmental Services and Parks and Nature Green Team invested reusable water bottles for staff.
- The Glendoveer Golf & Tennis Green Team replaced lights in the tennis center and driving range with LEDs. The tennis center upgrades have a four year return on investment.

PART 2: PROGRESS TOWARD SUSTAINABILITY GOALS

Goal 1: Reduce greenhouse gas emissions

	Goal	Reduce greenhouse gas emissions 80 percent below 2008 levels by 2050.
	Indicators	Greenhouse gas emissions for Scopes I, II and III reported in metric tons of carbon dioxide equivalent (MT CO ₂ e). Electricity consumption from Metro facilities reported in kilowatt-hours consumed (kWh).
	2020 target	25 percent reduction in greenhouse gas emissions (excluding supply chain) from 2008 levels.

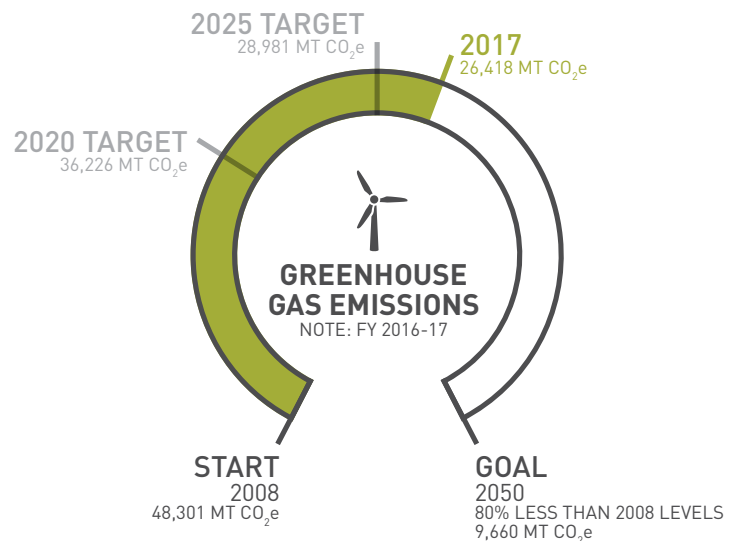
Metro's most recent greenhouse gas (GHG) emissions inventory for internal operations was completed in 2018 using FY 2016-17 data, following on the 2008 baseline and FY 2012-13 inventories (available at oregonmetro.gov/greenmetro). In FY 2016-17, Metro operations generated 26,418 metric tons carbon dioxide equivalent (MT CO₂e) from GHG sources included in Metro's climate reduction goal (non-supply chain emissions), a 46 percent decrease from baseline. This is equivalent to the emissions from energy used by 2,800 homes in one year, or from 5,600 cars driven for a year. The largest source was the fuel used by Metro-contracted trucks to transport community-generated solid waste from transfer stations to landfills. Other significant emissions sources included: building energy use, employee commute, St. Johns Landfill and Metro's fleet.

The most significant change in Metro's emissions for 2017 compared to baseline was an 84 percent reduction in electricity-related emissions from Metro's purchase of renewable energy and implementation of energy efficiency projects. Metro's emissions that increased compared to baseline included employee commute, vehicles and equipment, and business travel. These increases were due to the significant rise in the number of Metro employees, which almost doubled between 2008 and 2017.

Supply chain emissions added 29,700 MT CO₂e to the non-supply chain emissions for a total of 56,118 MT CO₂e Metro-wide emissions. Supply chain emissions represent the upstream impacts

generated during raw material extraction, production and transportation of purchased goods, energy, food, services and waste disposal. Metro's largest supply chain emissions sources in FY 2016-17 were building construction (37%), upstream energy production (20%), professional services (14%), and food (13%). While supply chain emissions are large in scale, they are very difficult to accurately track over time. In addition, while Metro has choices in purchasing and can leverage its purchasing power to influence vendor practices, Metro's ultimate control over its vendors' practices is limited. Due to these challenges, supply chain emissions are not included in Metro's emissions reduction goal; however Metro is committed to reducing supply chain emissions.

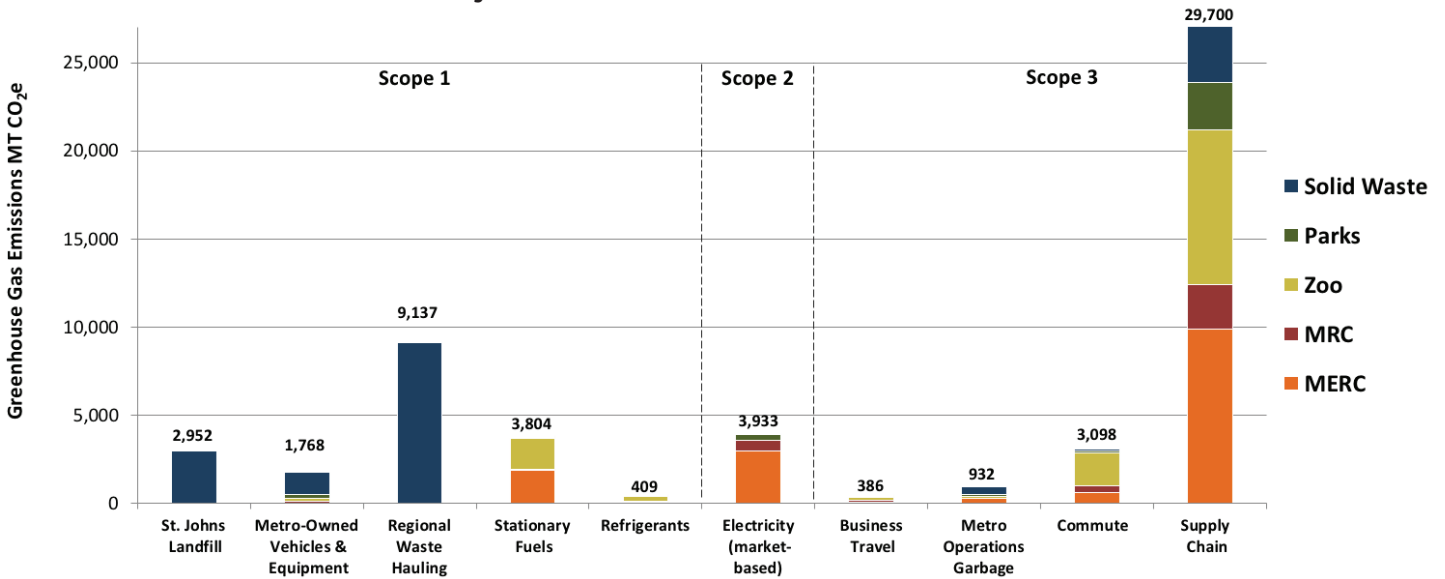
Metro also tracks electricity and natural gas consumption data annually for the purposes of this report. These two sources comprise 29 percent of Metro's non-supply chain emissions.



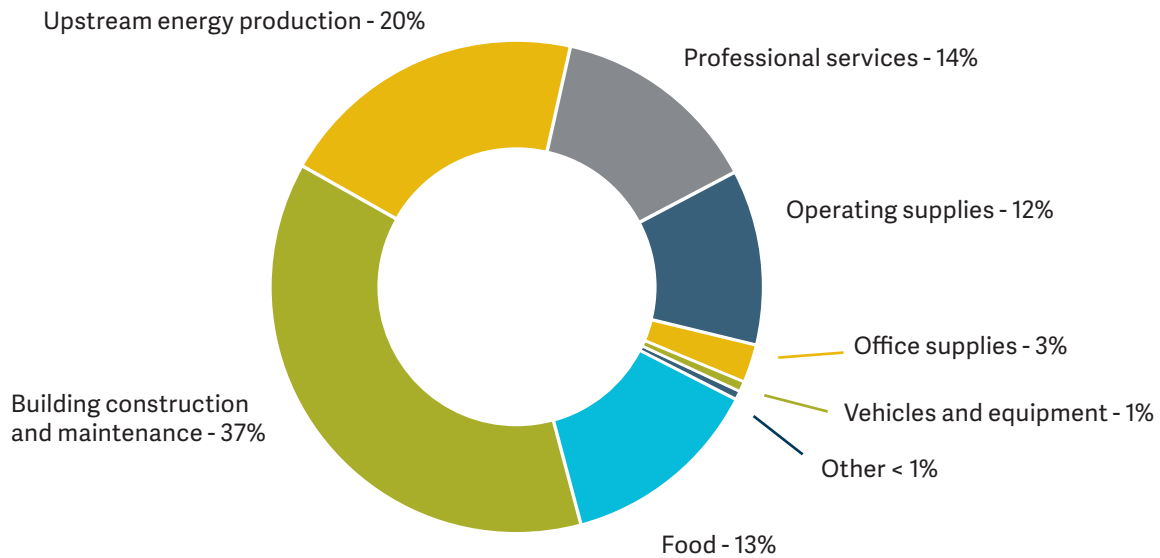
In FY 2018-19, Metro facilities consumed 27.1 million kWh of electricity, a 16 percent decrease from the 2008 baseline and 2 percent lower than the previous year. Metro facilities used 571,567 therms of natural gas in FY 2018-19, a 28 percent decrease from the FY 2010-11 baseline and 6 percent lower than the previous year.

In FY 2018-19, Metro received \$127,000 in funding from Energy Trust of Oregon for projects that are projected to save over 900,000 kilowatt-hours of electricity and over 47,000 therms of natural gas annually.

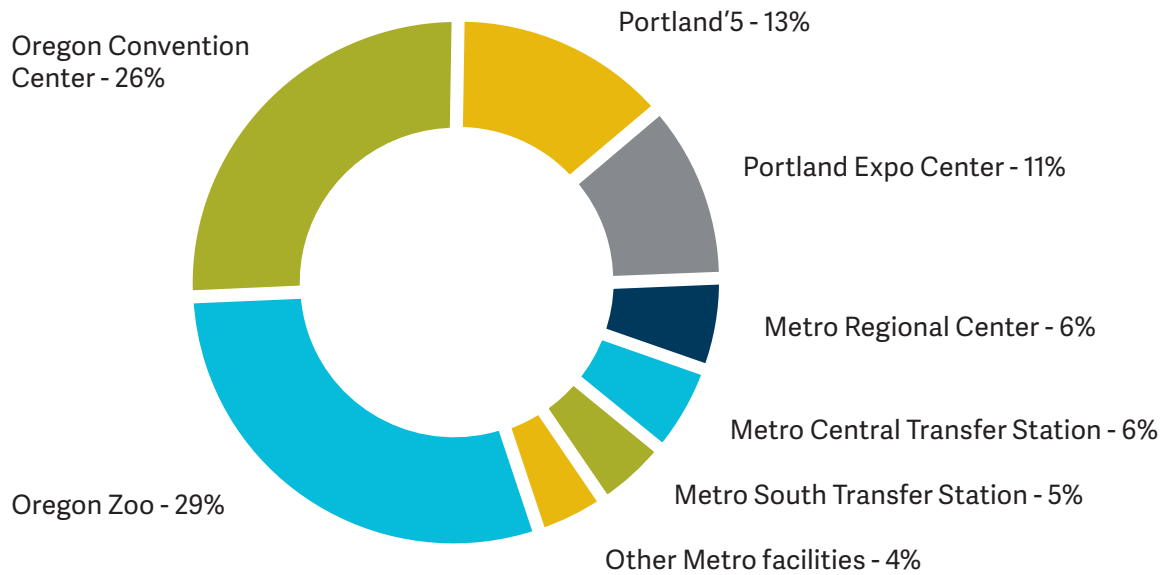
Metro-wide emissions by source and functional area, FY 2016-17



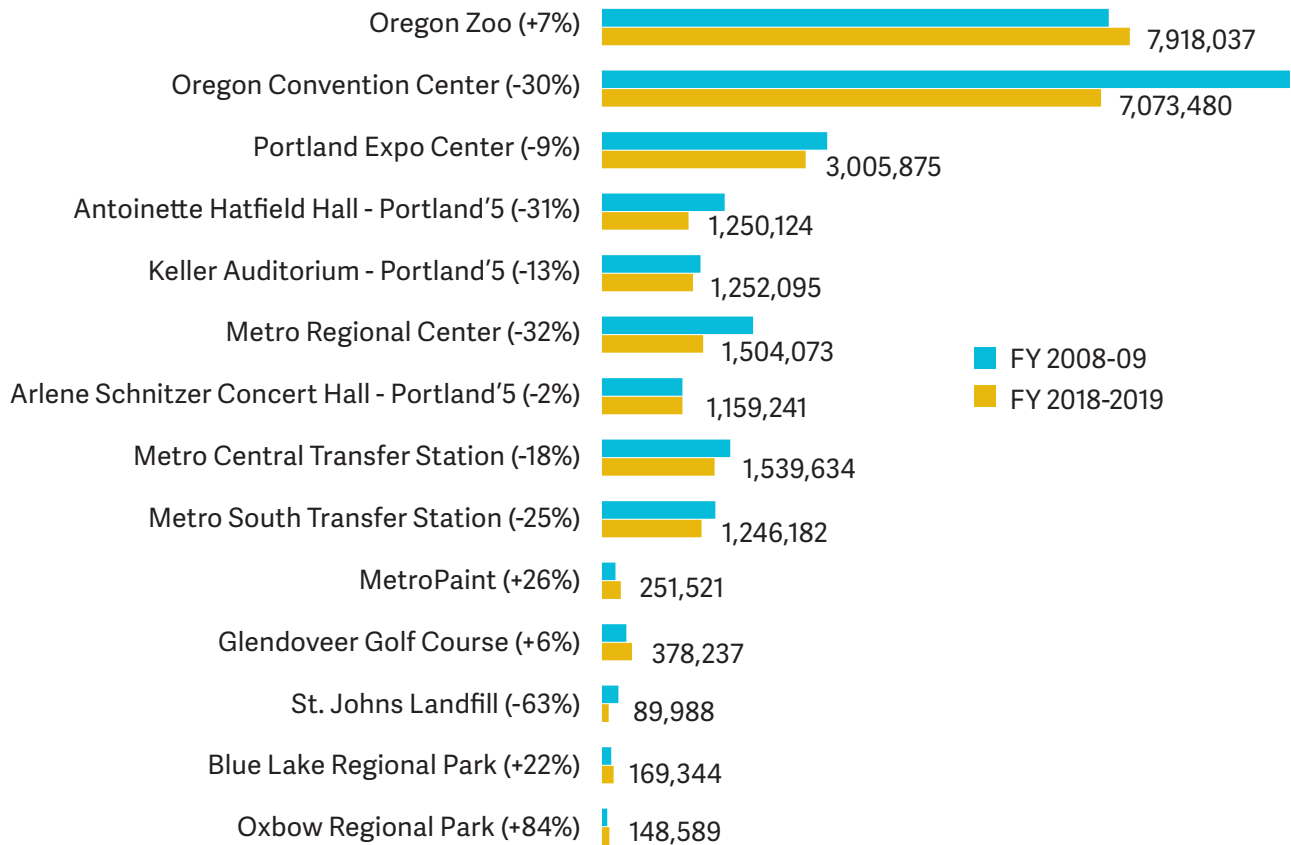
FY 2016-17 Metro-wide supply chain emissions by purchasing category



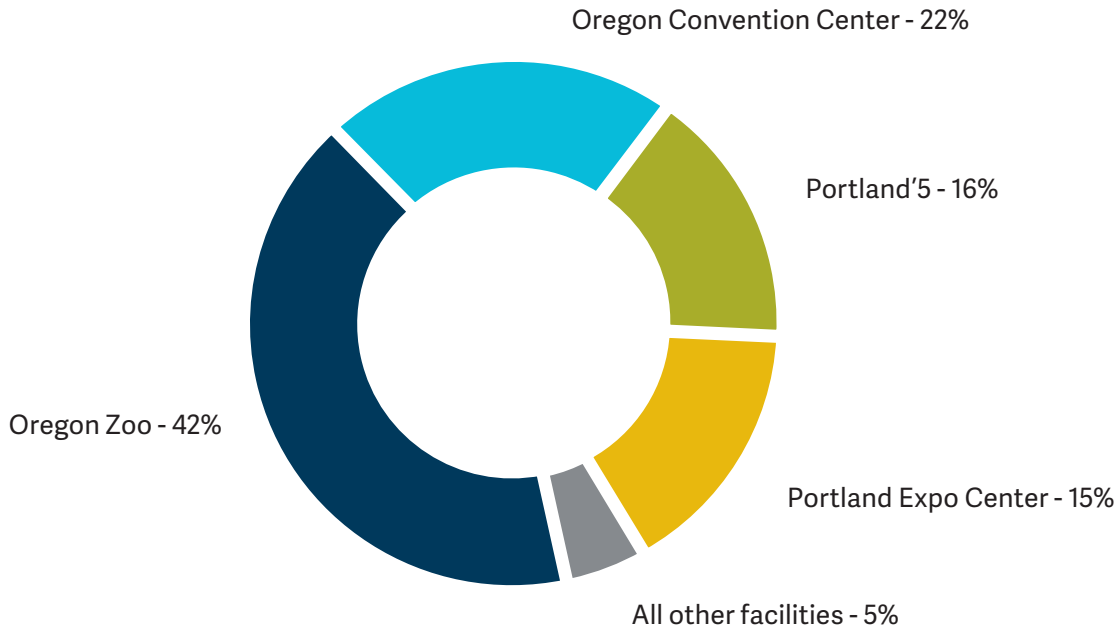
FY 2018-19 electricity use at Metro facilities as a percentage of agency total



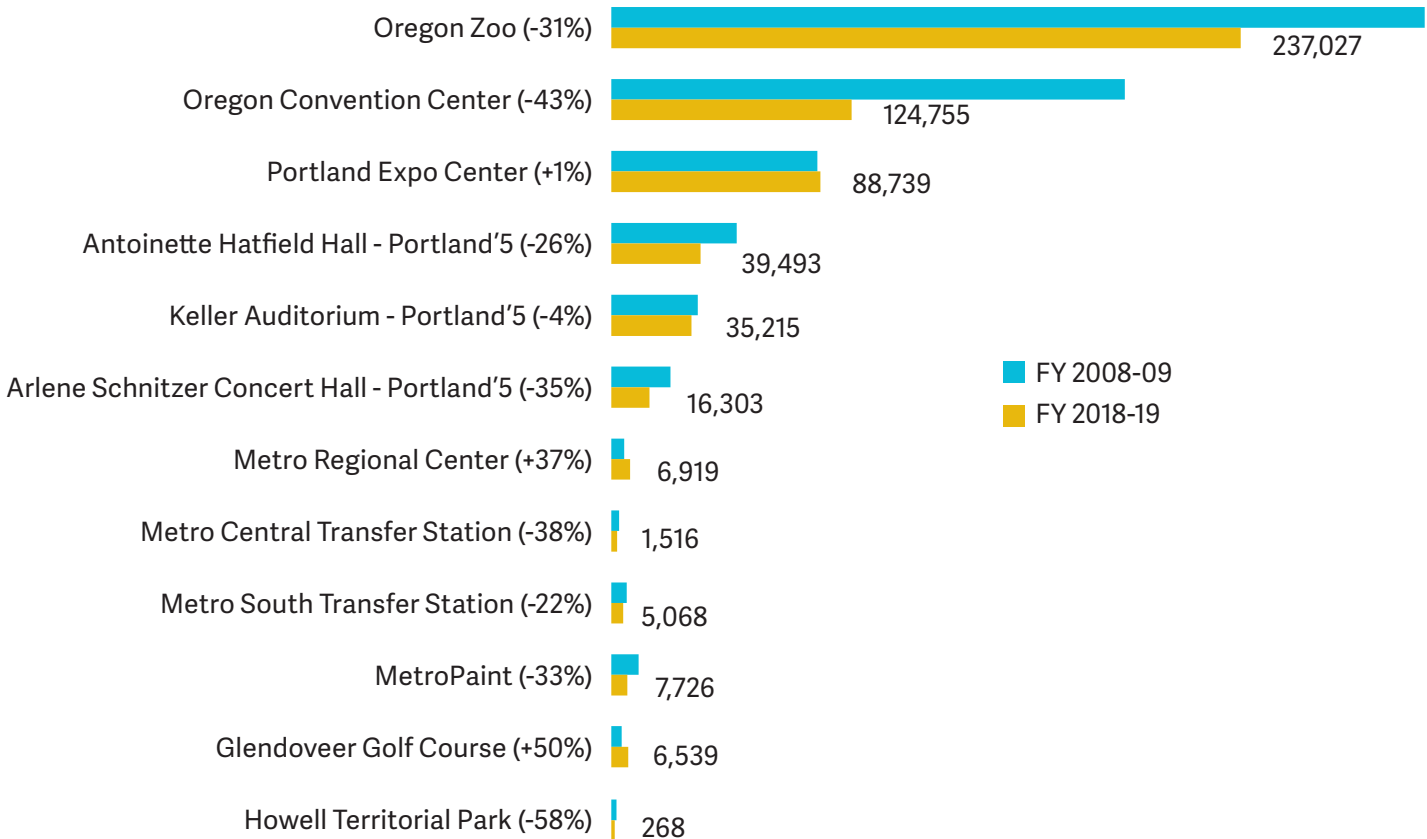
Electricity usage in kWh FY 2018-19 (percent change over baseline 2008-09)




FY 2018-19 natural gas usage at Metro facilities as a percentage of agency total



Natural gas usage in therms FY 2018-19 (percent change over baseline 2010-11)



Goal 2: Choose nontoxic



Goal	Eliminate the use or emissions of persistent bioaccumulative toxics (PBTs) and other priority toxic and hazardous substances by 2025.
Indicator	Percentage of chemical products used at Metro facilities that have ingredients rated as high hazard in any one or more of the following categories: human health, environmental toxicity, physical hazard, persistent, bioaccumulative or inherently toxic.

Metro uses chemical information from product safety data sheets to track the toxicity of products used in internal operations. Metro's Toxics Assessment Tool uses a variety of regulatory chemical lists, cross-referenced with the information contained in safety data sheets, to make toxic hazard determinations.

During FY 2014-15, Metro modified the Toxic Assessment Tool to be more robust and better reflect the intent of the Metro Council's adopted toxics reductions goal. In addition to flagging products rated high hazard for environment, health or physical hazard (the original methodology), the tool was improved to also identify products rated high hazard in the persistent, bioaccumulative or inherently toxic categories. In addition, products which receive a high hazard rating in all six of the hazard categories are identified as the most hazardous, deemed "worst of the worst." Metro's toxics reduction efforts focus on phasing out and seeking safer alternatives to these most toxic products. The change in methodology reset the baseline to FY 2014-15 and triggered the need to set a new goal and interim targets after Metro has a few years of data under the new methodology.

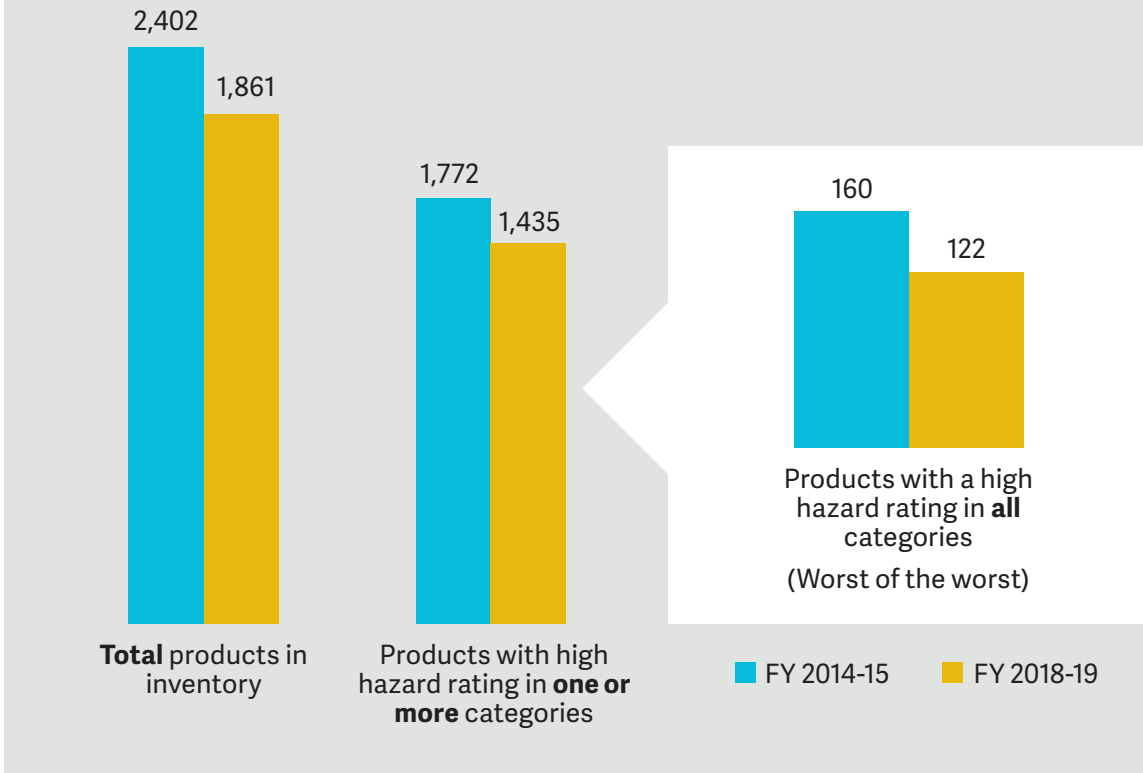
At the time the data was generated for this report, there were a total of 1,861 unique safety data sheets in Metro's database, representing chemical products housed at Metro facilities. In

FY 2018-19, the percentage of products in Metro's inventory with a high hazard in one or more category was 77 percent (compared to 74 percent in FY 2014-15), while the percentage of products deemed "worst of the worst" remained seven percent – unchanged from the baseline. However, Metro reduced the total number of products in its inventory, so while the percentages did not change substantially, the actual number of toxic products has decreased significantly.

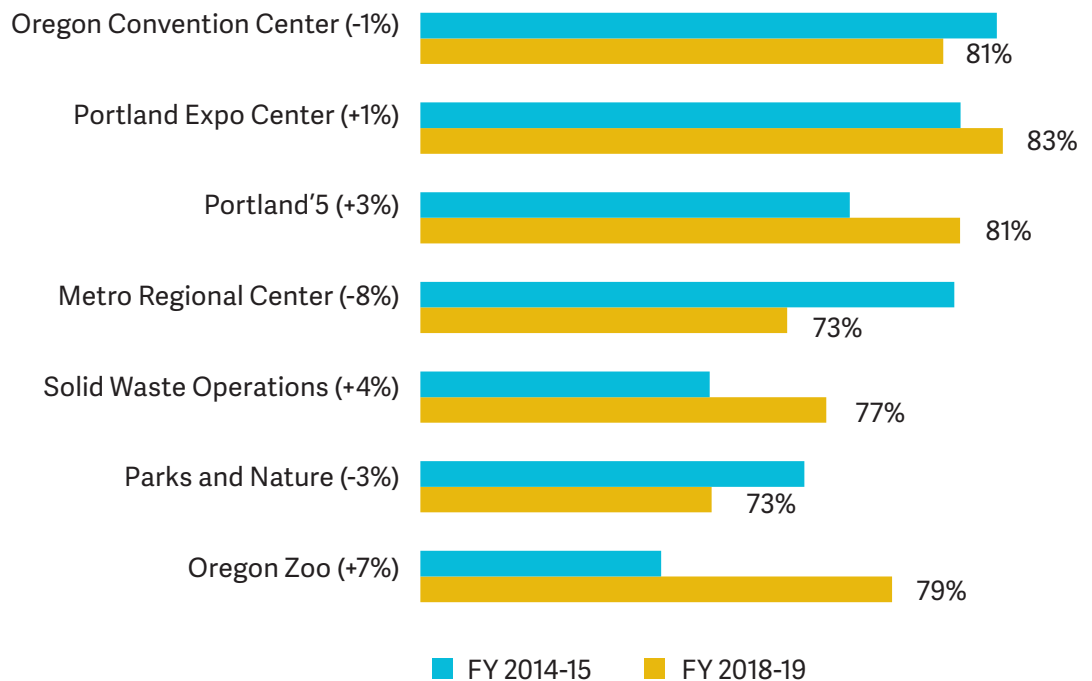


¹ Safety data sheets describe the hazards of working with a chemical and procedures to ensure safety.


FY 2018-19 number of chemical products rated high hazard in Metro's inventory



FY 2018-19 percentage of chemical products with a high hazard rating in one or more category



Goal 3: Reduce waste



Goals	Reduce overall generation of waste, and recycle or compost all remaining waste by 2025.
Indicators	Weight (tons) of waste generated (garbage plus recycled materials ¹). Percent of waste recycled.
2020 targets	Reduce waste generation 20 percent from 2008 levels by 2020. Recycle 90 percent of waste by 2020.

To measure progress toward this goal, Metro tracks overall waste generation and recycling from the major facilities in the agency's portfolio. Metro facilities generated 4,081 tons of waste in FY 2018-19 and recycled 48 percent of total waste.

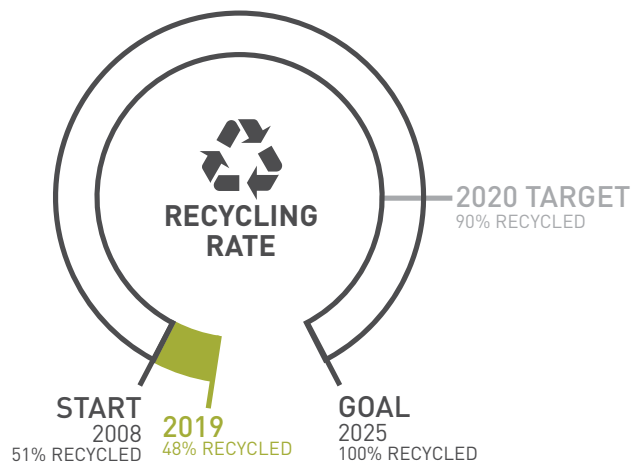
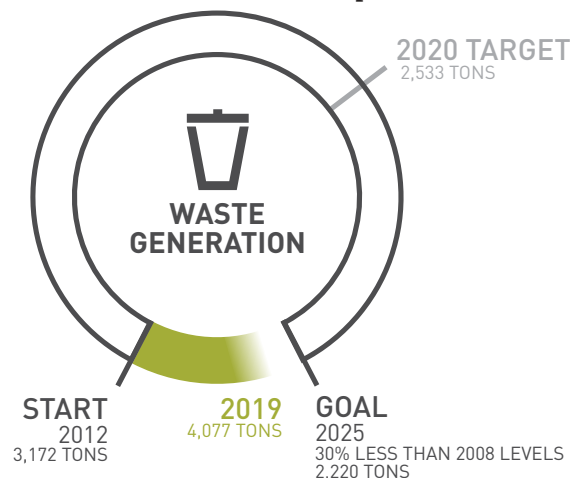
Despite a downward trend in recent years, overall waste generation across Metro's facilities is 29 percent higher than baseline, far from the 2020 interim target of 20 percent below baseline. Part of this rise is due to a significant increase number of visitors at Metro's visitor venues.

Metro's recycling rate has decreased from the baseline of 51 percent to 48 percent. Metro will not come close to reaching the 2020 interim target of a 90 percent recycling rate. However, the recycling rate has improved compared to baseline at all facilities except for Metro

Regional Center, Metro Paint and Oxbow Regional Park.

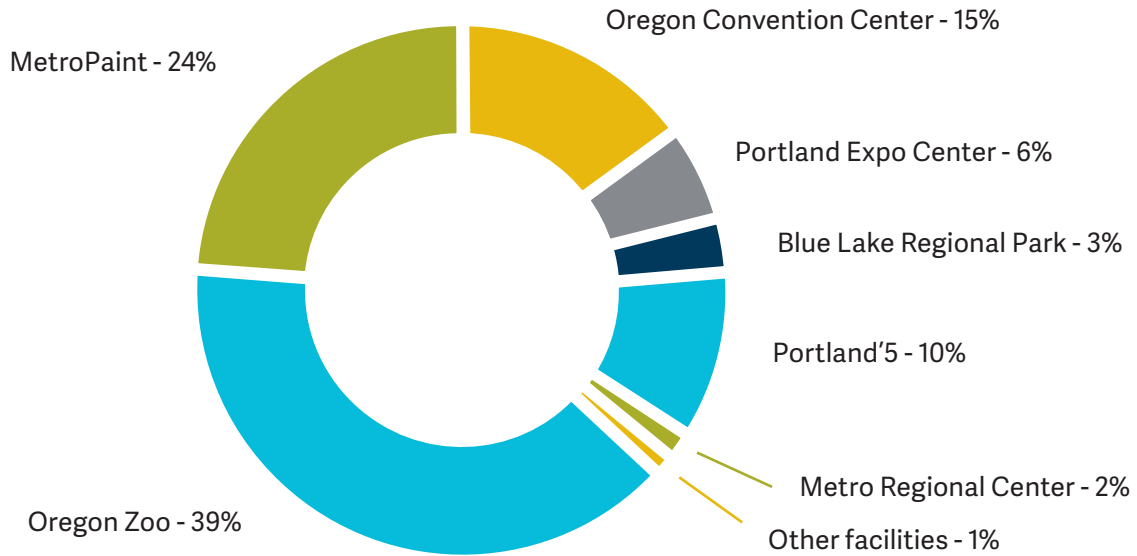
Some notable factors that affected the overall recycling rate decrease included a reduction in the volume of animal waste composted into ZooDoo due to instances of tuberculosis in the elephant population. At MetroPaint, several factors reduced the recycling of plastic and metal paint buckets.

Metro has been conducting waste sorts at our largest facilities to better understand the nature of waste generated, pinpoint contamination of the recycling and composting streams, and identify opportunities to reduce the amount of recoverable materials ending up in the landfill stream. Results from these sorts will inform the development of waste prevention and reduction plans at these facilities.

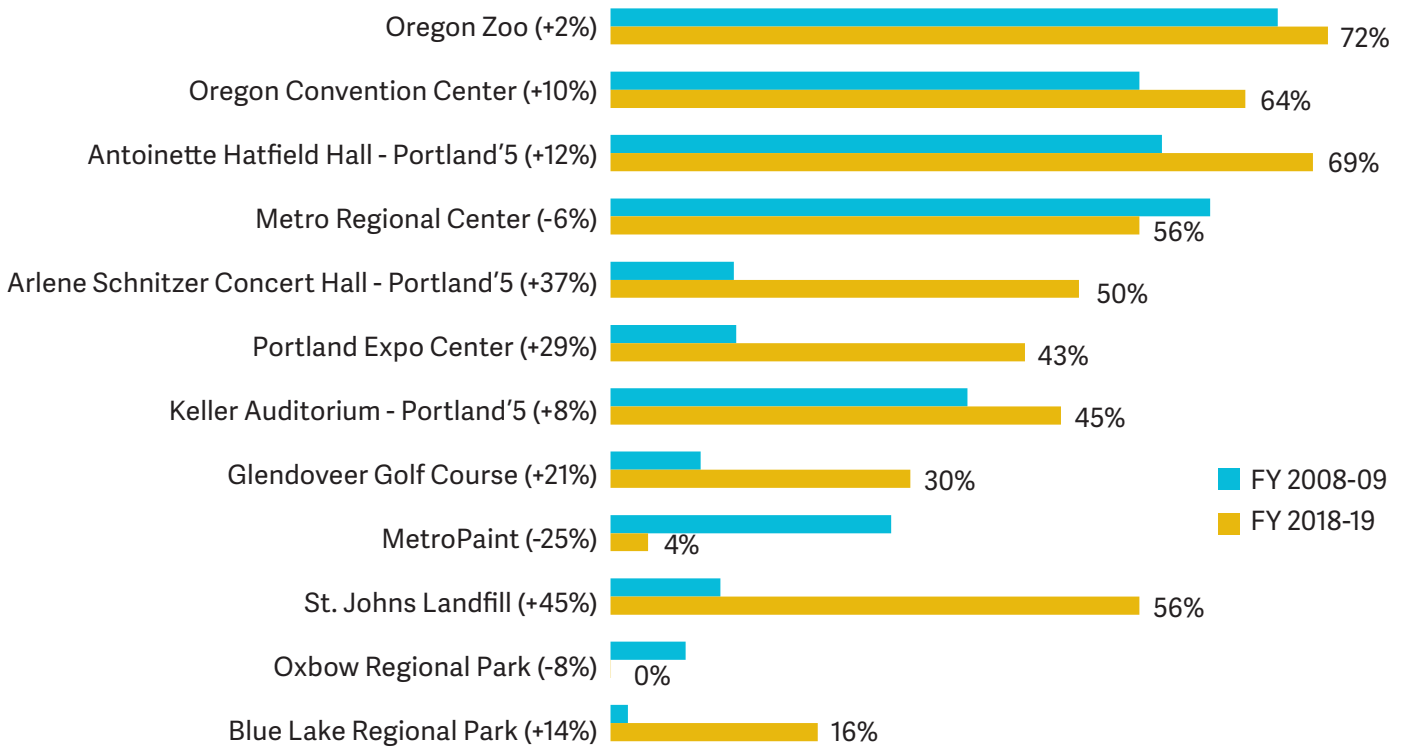


¹ Recycled materials include standard recyclables, as well as yard debris or food scraps that were composted or anaerobically digested.

FY 2018-19 total waste generated as a percentage of agency total



FY 2018-19 recycling rate at Metro facilities compared with baseline year (varies)^{1,2}



¹Baseline years for calculating recycling vary based on earliest available complete data set for that facility. The following facilities have a 2008 baseline year: Oregon Zoo, Oregon Convention Center, Portland Expo Center, Metro Regional Center and MetroPaint. FY 2010-11 baseline year: All Portland'5 Centers for the Arts facilities and Oxbow Regional Park. FY 2011-12 baseline year: Blue Lake Regional Park. FY 2012-13 baseline year: Glendoveer Golf and Tennis, St. Johns Landfill.

²The Zoo's recycling rate includes composting of manure and animal bedding; subtracting those materials out would reduce the recycling rate to 47 percent.

Goal 4: Conserve water



Goal	Use 50 percent less water from 2008 levels by 2025.
Indicator	Gallons of water consumed from water utilities and on-site sources.
2020 target	Use 40 percent less water from 2008 levels by 2020.

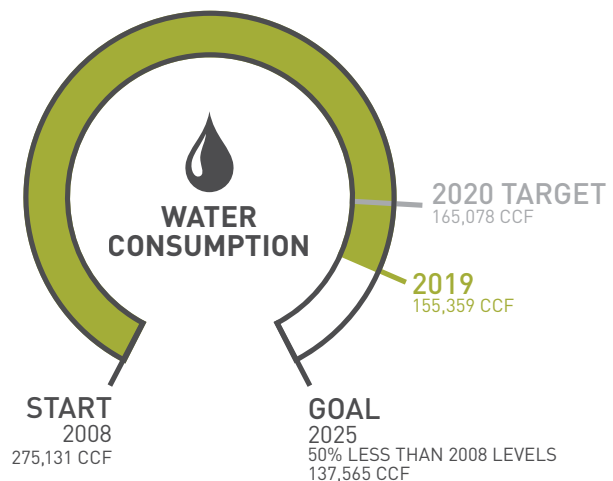
Metro collects water usage data for its facilities from water-providing utilities and from well water records. Water use is reported in CCF, or hundred cubic feet (equivalent to 748 gallons).

In FY 2018-19, Metro facilities consumed 155,359 CCF (116 million gallons) of water, including about 75,014 CCF (56.1 million gallons) from onsite wells. This amount of water equates to about 176 times the volume of an Olympic-sized swimming pool. Water use in FY 2018-19 was 44 percent less than the FY 2008-09 baseline, a substantial reduction that puts Metro ahead of the 2020 target of 40 percent reduction (165,078 CCF).

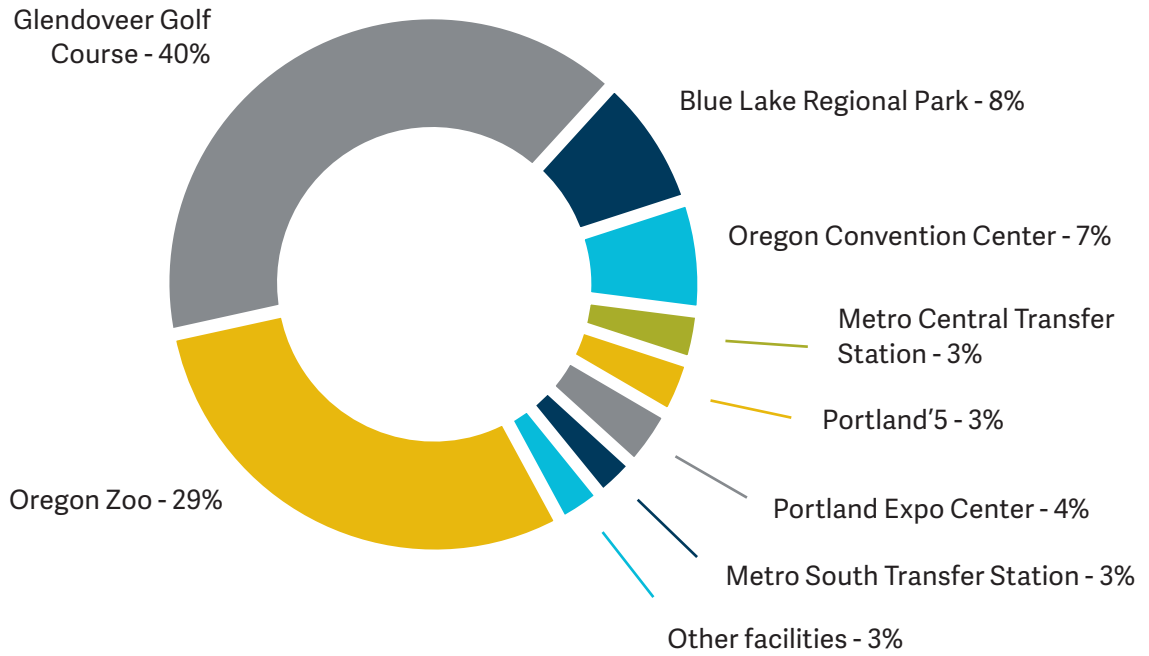
Oregon Zoo and Glendoveer Golf and Tennis Center continue to be Metro’s top water users, comprising 70 percent of Metro’s total water consumption. Reaching Metro’s water conservation goal hinges on further reductions

at these two facilities. Efforts at the Oregon Zoo to fix leaks and improve water efficiency, as well as demolition of the polar bear exhibit, reduced water use substantially in FY2018-19, achieving a 41 percent reduction in water use compared to the previous year. Glendoveer Golf and Tennis also saw a significant decrease in irrigation water use compared to last year, likely due to the milder summer temperatures.

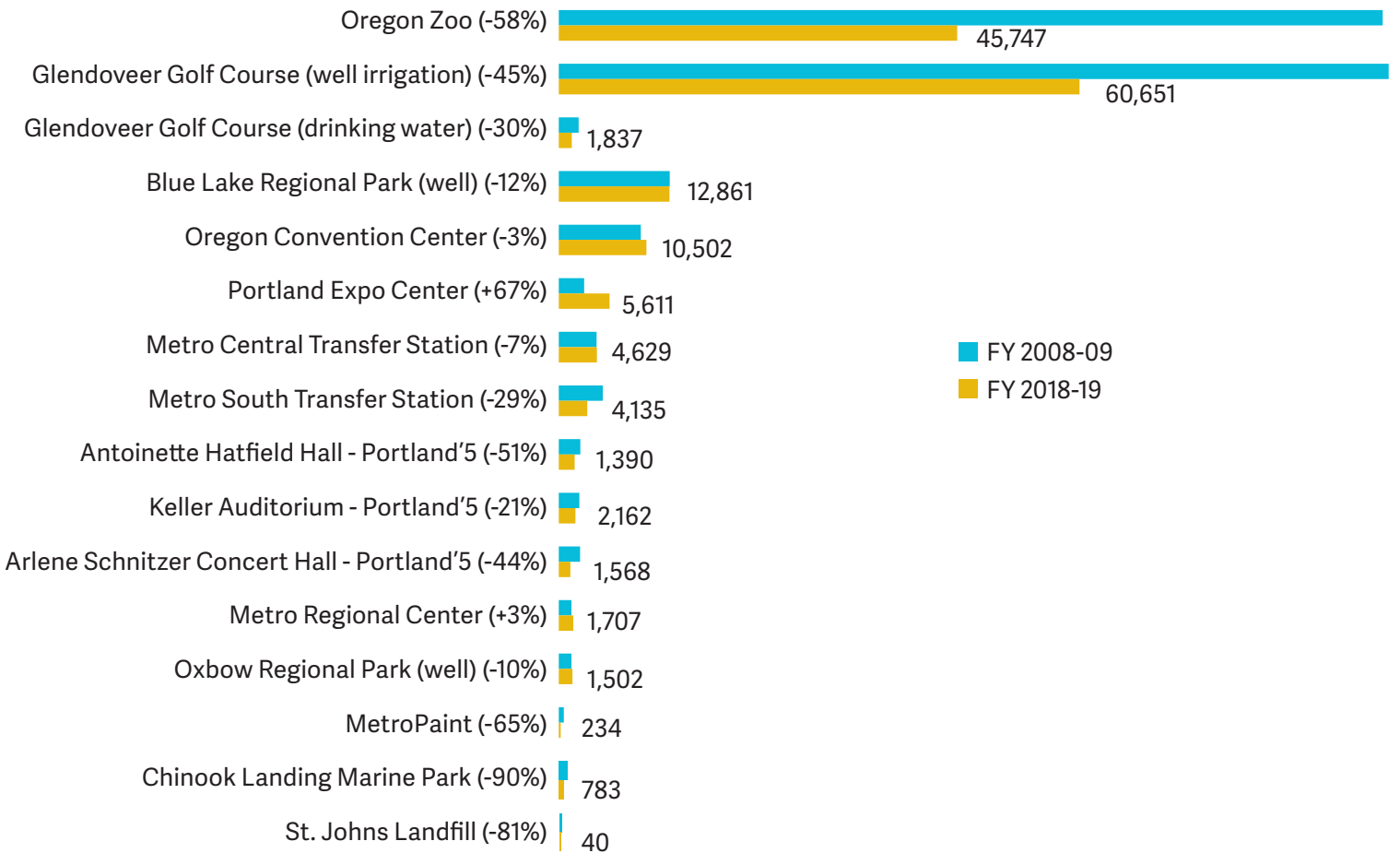
The hotter, drier summers predicted as a result of climate change will continue to place increasing demands on water supplies for irrigation and indoor water use at Metro facilities. Meeting this challenge will require implementation of innovative approaches and practices across Metro, such as water smart landscaping, rainwater and greywater harvesting, and high efficiency plumbing fixtures.




FY 2018-19 water usage as a percentage of agency total



FY 2018-19 water usage compared with FY 2008-09 baseline (CCF)



Goal 5: Enhance habitat and reduce stormwater

	Goals	Ensure that Metro’s parks, trails, natural areas and developed properties positively contribute to healthy, functioning ecosystems and watershed health by 2025.
	Indicators	Percentage of effective impervious area on Metro’s developed properties; impervious surfaces directly connected to a stream or drainage system and not directed to a green roof, swale or other pervious area.
	2020 target	Reduce effective total impervious area on developed properties to 25 percent. Identify habitat-friendly improvement opportunities for developed properties.

Tracking effective impervious surface area is a way to monitor stormwater runoff from Metro’s developed properties and resulting impacts to habitat health. Effective impervious area measures the amount of hardscape on a developed property (e.g., roofs, parking lots, sidewalks) that sends water directly to a waterway or sewer without being treated by an ecoroof, bioswale or other stormwater treatment facility. The higher the amount of effective impervious area, the more significant the property’s negative impact on water quality and wildlife habitat.

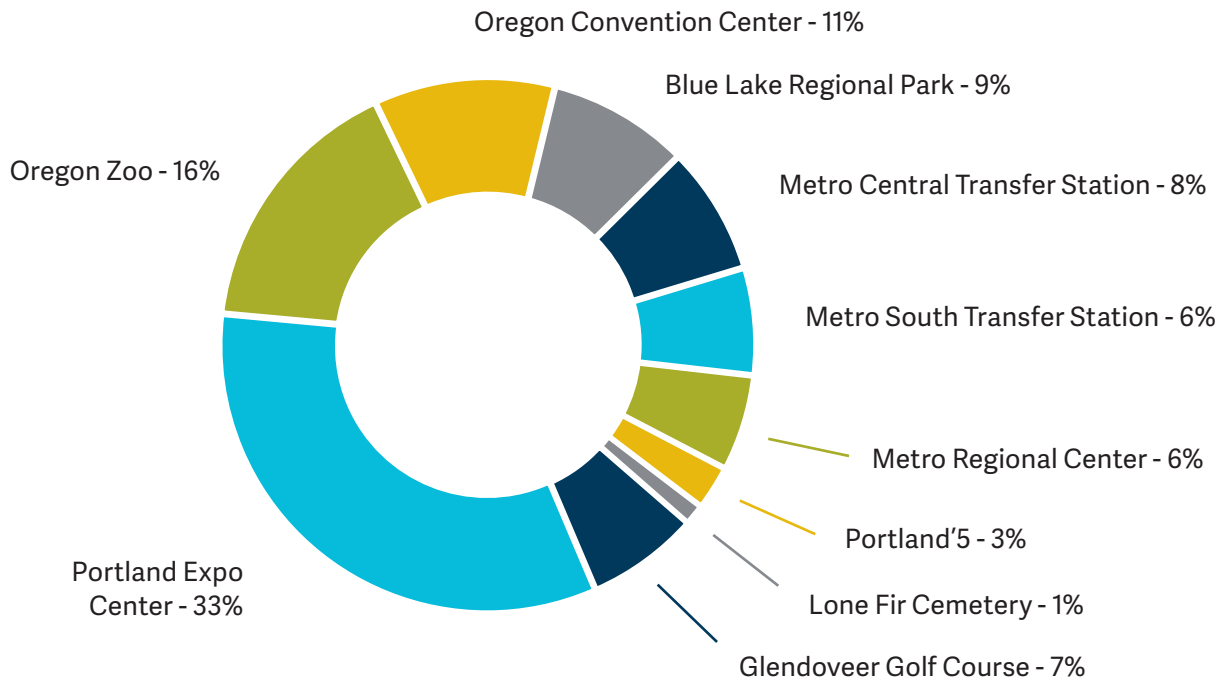
development features on properties as opportunities have arisen. For instance, in FY 2016-17, stormwater planters were installed to treat all of the stormwater runoff from the Zoo Education Center, and improvements to the maintenance yard at Blue Lake Regional Park included bioswales that treat runoff from all impervious surfaces. This builds on previous work, including rain gardens planted at Blue Lake Regional Park restrooms in FY 2015-16 and a stormwater green wall installed at the Portland Expo Center in FY 2013-14.

In FY 2018-19, the overall percentage of effective impervious area on Metro’s developed properties was 78 percent, unchanged from the previous year. This is far from the 2020 target of 25 percent. Reducing effective impervious area is a particularly challenging goal given the nature of many of Metro’s developed properties. For instance, space limitations on several of Metro’s properties restrict the ability to install bioswales, and some older buildings lack the structural integrity to support ecoroofs. With 33% of the agency’s total impervious area, the Expo Center really drives performance in this goal area. Opportunities to reduce effective impervious area in the extensive parking lot at the Expo Center have not yet been realized due to cost barriers.

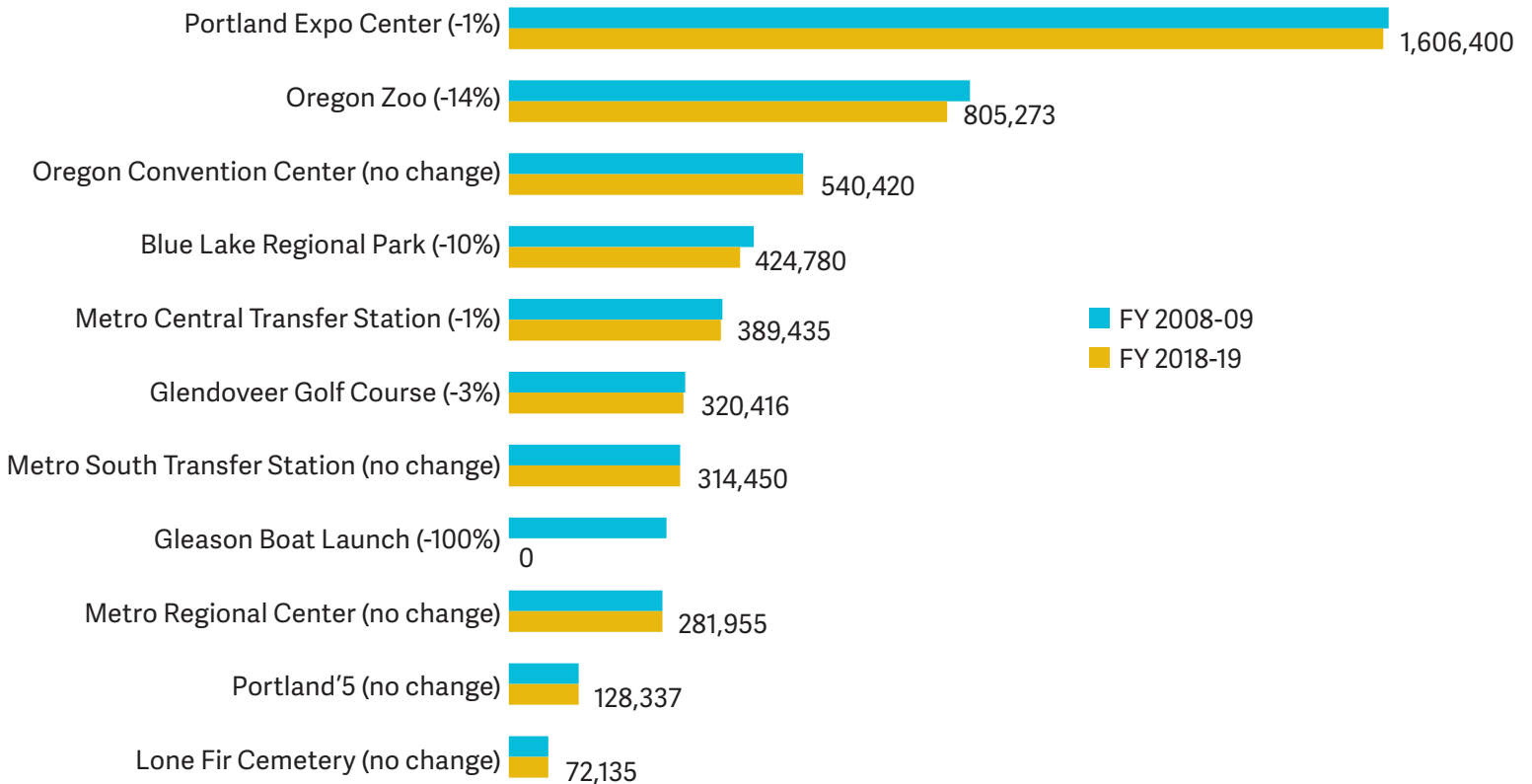
However, Metro has implemented low impact



FY 2018-19 effective impervious areas as a percentage of agency total



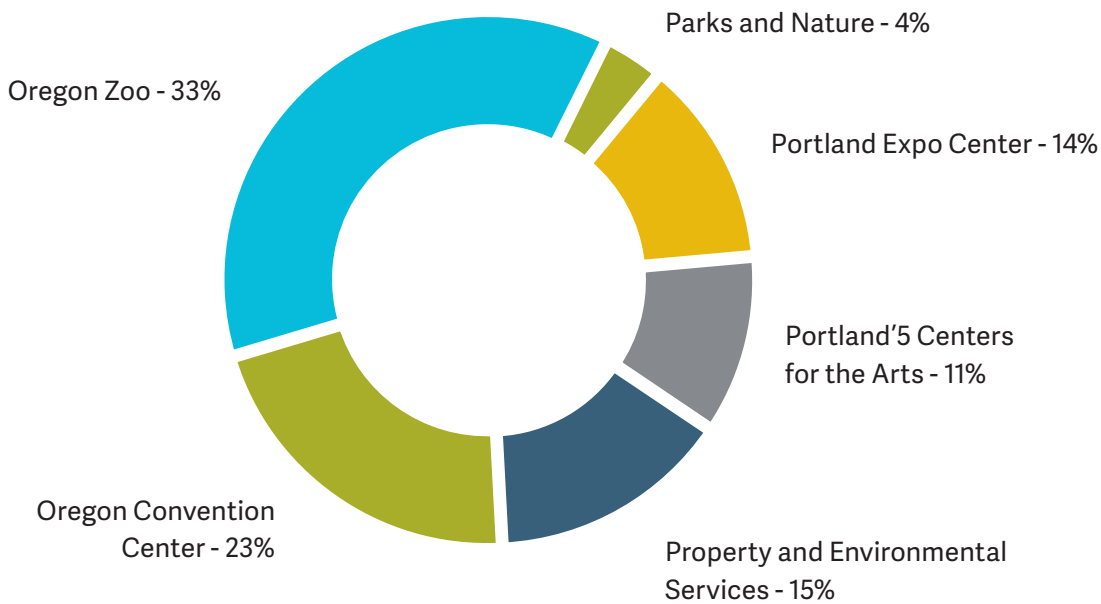
FY 2018-19 effective impervious area in square feet (change compared to baseline 2008-09)



Utility Costs FY 2018-19

Many of Metro's sustainability activities revolve around improving facility systems and operations to make them more energy and water efficient, as well as reduce costs. The following utility costing data provides financial context and a sense of scale to the resource consumption that accompanies operation of Metro facilities and visitor venues.

FY 2018-19 utility consumption costs for Metro facilities



Department/Facility	Electricity	Natural gas	Water	Wastewater	Stormwater	Total utility expenses
Oregon Convention Center	\$716,797	\$96,905	\$68,234	\$94,979	\$106,666	\$1,083,581
Oregon Zoo	\$655,391	\$138,161	\$232,353	\$458,352	\$77,096	\$1,561,353
Parks and Nature	\$110,874	\$6,203	\$20,995	\$15,921	\$38,821	\$192,814
Portland Expo Center	\$346,882	\$72,558	\$34,415	\$59,989	\$168,475	\$682,319
Portland's 5	\$370,159	\$70,580	\$30,759	\$54,569	\$16,626	\$542,693
Property and Environmental Services	\$467,937	\$18,577	\$61,526	\$79,920	\$109,720	\$737,680
FY 2018-19 totals	\$2,668,040	\$402,984	\$448,282	\$763,730	\$517,404	\$4,800,440
<i>FY 2017-18 totals</i>	<i>\$2,778,952</i>	<i>\$446,635</i>	<i>\$552,261</i>	<i>\$990,707</i>	<i>\$501,539</i>	<i>\$5,270,094</i>
<i>FY 2016-17 totals</i>	<i>\$2,790,131</i>	<i>\$539,524</i>	<i>\$543,062</i>	<i>\$1,063,409</i>	<i>\$485,816</i>	<i>\$5,421,942</i>
<i>FY 2015-16 totals</i>	<i>\$2,652,896</i>	<i>\$420,046</i>	<i>\$510,564</i>	<i>\$1,025,734</i>	<i>\$426,838</i>	<i>\$5,036,078</i>

Energy efficiency and renewable energy project incentives FY 2018-19

Metro worked closely with the Energy Trust of Oregon to implement energy efficiency and renewable energy projects at Metro facilities and visitor venues in FY 2018-19. Metro received \$126,707 in funding for projects that are projected to save over 935,000 kilowatt-hours of electricity and over 47,000 therms of natural gas annually.

Summary of incentives from Energy Trust of Oregon, FY 2018-19

Program, Project and Products	Incentive Received (\$)	Electricity savings (kWh)	Natural gas savings (therms)
Glendover Golf & Tennis			
LED lighting for indoor tennis court	13,361	41,741	0
LED lighting for Pro Shop & offices	1,110	5,778	0
Subtotal	\$ 14,471	47,519	0
Oregon Convention Center			
Strategic Energy Management	5,300	0	0
Gas Fryer	3,200	0	1,502
LED Lighting	3,375	11,787	0
Study for chiller plant upgrade	5,700	0	0
Custom VFDs	30,878	363,081	0
Custom VFDs	10,117	69,927	0
Subtotal	\$ 58,571	444,795	1,502
Oregon Zoo			
Strategic Energy Management	19,336	347,316	46,024
Education Center - Net Zero Energy Metering	14,529	0	0
Subtotal	\$33,865	347,316	46,024
Portland Expo Center			
LED lighting	19,800	95,519	0
Subtotal	19,800	95,519	0
Grand total	\$ 126,707	935,149	47,526



About Metro's Sustainability Program

Metro's Sustainability Program coordinates implementation of the agency's Sustainability Plan for internal operations.

Sustainability Steering Committee

A steering committee of representatives from Metro's major facilities and venues and key departments provides oversight and accountability for implementation of the Metro Sustainability Plan. Committee members in FY 2018-19 were:

- Julie Bunker and Ed Williams, Portland's Centers for the Arts
- Will Cortez and Lydia Neill, Oregon Zoo
- Ryan Harvey and Matthew Uchtman, Oregon Convention Center
- Chuck Dills and Alicia Crawford Loos, Portland Expo Center
- Nicole Lewis and Jen Keisler Fornes, Parks and Nature
- Michael Guebert and Debbie Humphrey, Property and Environmental Services, Solid Waste Operations
- Nancy Strening, Construction Project Management Office
- Rory Greenfield and Susan Boase, Metro Regional Center operations
- Tracy Fisher and Riko Tannenbaum, Finance and Regulatory Services, Procurement Services division
- Cinnamon Williams and Stephen Albaugh, Finance and Regulatory Services

Green Teams

Five green teams advance implementation of sustainable practices at Metro workplaces.

The following Metro employees served as chairs of the green teams during FY 2018-19:

- Patrick Morgan, Metro Regional Center
- Sarah Vaca, Property and Environmental Services/ Parks and Nature
- Ryan Harvey, Oregon Convention Center
- Andrea Abbott, Portland's Centers for the Arts
- Chuck Dills, Portland Expo Center
- Will Cortez, Oregon Zoo
- Carolyn Sherman, Glendoveer Golf and Tennis Center



Conclusion

This report highlights just a portion of the work done in fiscal year 2018-19 to advance Metro's progress towards its internal sustainability goals. Data on sustainability indicators signals that Metro will need to implement much more ambitious initiatives if it is to meet all of the adopted sustainability goals within the target timeframe.

While increased visitors at Metro's venues, changing recycling markets and other factors pose challenges to Metro's progress toward these goals, Metro's commitment remains steady. The prosperity of our region depends on healthy and functional ecological, social and economic systems, and Metro continues to seek ways to reduce the impacts of its operations on these systems.

Learn more about Metro's internal sustainability program at:

oregonmetro.gov/greenmetro



The progress shared in this report results from the vision and leadership of the Metro Council and the commitment and ingenuity of hundreds of staff across the agency, in particular, those serving on Metro's Sustainability Steering Committee and green teams.