



Sustainability report

FY 2016-17

November 2017

oregonmetro.gov/greenmetro

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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Sustainability at Metro

In 2003, the Metro Council set an ambitious target for business operations to be sustainable within one generation. To this end, the Council adopted goals in five key categories, listed on the following page. The goals are slated for completion by 2025, or in the case of greenhouse gas emissions, 2050.

About Metro's sustainability program

Metro's Sustainability Program coordinates implementation of the agency's Sustainability Plan for internal operations, which identifies strategies and nearly 100 actions to achieve the goals. A steering committee of representatives from Metro's major facilities and venues and key departments provides oversight and accountability for implementation of the plan. Green teams across the agency support implementation of sustainable practices in Metro workplaces.

What does sustainability mean?

In 2008, the Metro Council adopted the State of Oregon's triple bottom line definition of sustainability to encompass people, planet and prosperity:

"Using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic and community objectives."

Metro is working to integrate equity into its Sustainability Plan and implementation, consistent with *Metro's Strategic Plan to Advance Racial Equity, Diversity and Inclusion* and *Diversity Action Plan*.

Contact

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Learn more about Metro's internal sustainability program at:

oregonmetro.gov/greenmetro



Introduction

As a regional government committed to promoting sustainable communities, Metro also strives to make its own operations sustainable. This report describes progress in fiscal year 2016-17 toward achieving Metro’s internal sustainability goals at the agency’s venues, theaters, parks, office buildings and solid waste facilities.

The story of Metro’s advancement toward these goals is told by progress in key indicators and by accomplishments across the agency. Both are included in this report. Access this report and more detailed information at oregonmetro.gov/greenmetro.

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 positively contribute to healthy, functioning ecosystems and watershed health.

Progress summary

Metro tracks six indicators to monitor progress over time toward the adopted sustainability goals, as well as toward interim targets for each goal. Metro has made progress on four out of the six indicators: greenhouse gas emissions, recycling, water and effective impervious area. Waste generation and toxics are trending in the wrong direction.

Key Accomplishments

Metro increases renewable energy purchasing

The Oregon Zoo joined several Metro facilities to offset 100 percent of its energy use with purchase of green energy from Northwest wind projects. With that addition, Metro purchased enough renewable energy from utilities to offset 71 percent of the total electricity used from the grid in fiscal year 2017. Purchase of renewable energy reduces greenhouse gas emissions and supports development of domestic sources of cleaner, renewable energy.

Renewable energy purchase at Metro facilities

Renewable energy purchase as percent of total energy use from the grid

Oregon Zoo	100%
Oregon Convention Center	100%
Metro Central Transfer Station and Household Hazardous Waste	100%
Metro South Transfer Station and Household Hazardous Waste	100%
MetroPaint	100%
Metro Regional Center	30%
Portland's Arlene Schnitzer Concert hall	19%
Portland's Keller Auditorium	18%
Portland's Antoinette Hatfield Hall	18%

Oregon Convention Center harnesses the sun

The first year of power generation from the two-megawatt, 6,500-solar panel array on the roof of the Oregon Convention Center generated almost 1.8 million kilowatt-hours, reaching the target of 25 percent of the Center's energy use. The solar energy generated could power 166 average Oregon homes for an entire year.





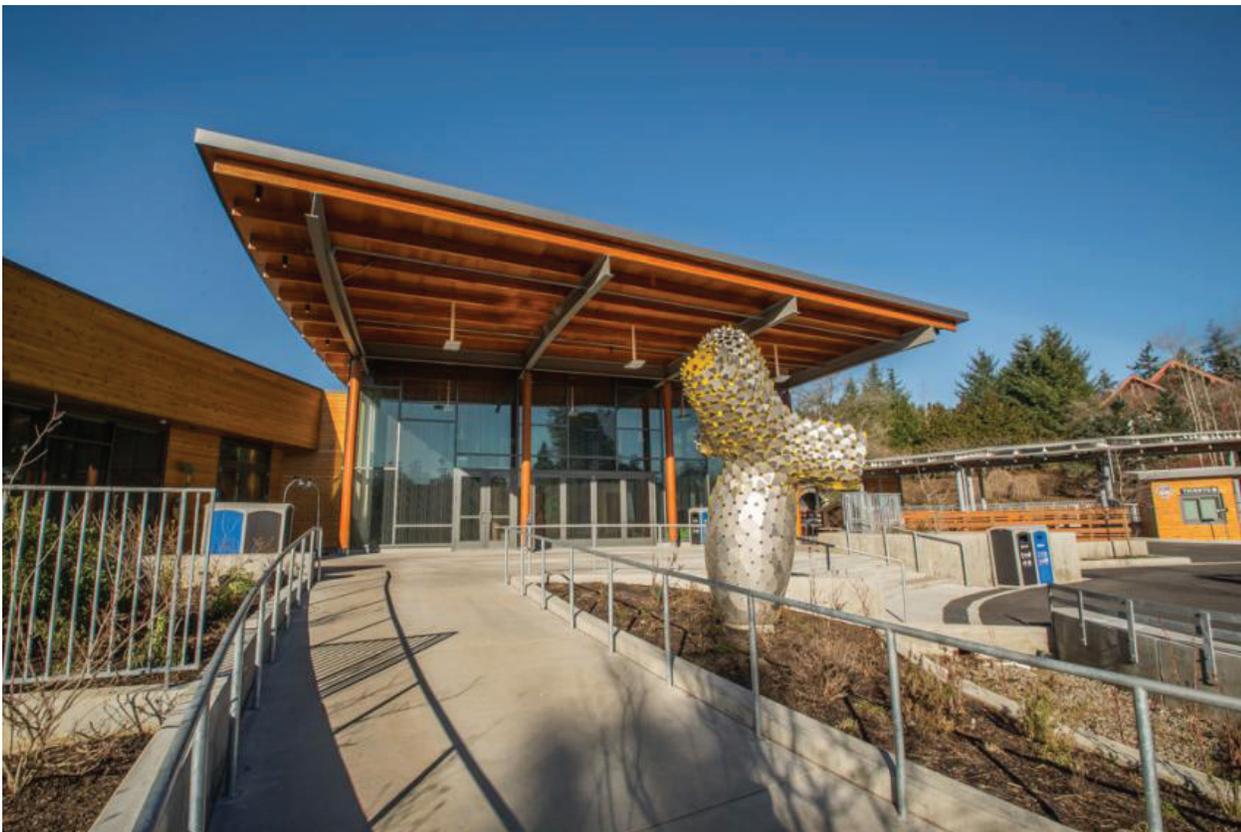
Oregon Convention Center does more with less energy

The Convention Center installed a new LED lighting system in its iconic glass spires that uses less than half of the energy of the former lights and also allows the towers to glow in various colors to reflect the branding of an event happening inside or public observances.

Programming updates to heating and cooling controls at the Convention Center resolved client comfort issues while also saving enough natural gas in a year to pay back the cost of the project, which was cut in half due to incentives from the Energy Trust of Oregon.

Oregon Zoo Education Center wins high performance building award

The new Education Center won the Energy Trust of Oregon's High Performance Building Award for new construction. 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, raingardens, a wildlife garden, salvaged building materials and bird-friendly glass.



Employees and partners can charge up at the Zoo

A new two-port electric vehicle charging station installed near the facilities management building serves Zoo staff and key conservation partners at the Education Center.



Steller Cove gets efficiency upgrade

At the Zoo's Steller Cove exhibit, keeping the sea lions cool requires a lot of energy – historically more than a quarter of the Zoo's total electricity use. With critical cooling equipment nearing the end of its life, the Zoo took the opportunity to upgrade to more efficient systems, projected to save more than \$38,000 a year. The Zoo received \$98,000 in incentives from the Energy Trust of Oregon.

Dressing room mirrors go LED at Portland's venues

Portland's venues made extensive lighting upgrades, including nearly 3,000 LED lamps for all dressing room mirrors in Arlene Schnitzer Concert Hall, Antoinette Hatfield Hall and Keller Auditorium. Dressing room lamps went from 25-watt incandescent bulbs to 0.6-watt LED lights, saving enough energy to power 35 average Oregon homes each year.

New fixtures save water at Portland Expo Center

Public restrooms at the Portland Expo Center now use much less water, thanks to the replacement of 158 toilets and 38 faucets with new, water efficient fixtures.

Office spaces go green at Metro Regional Center

Sustainability guided an office reconfiguration project at the Metro Regional Center. The new cubicle furniture not only lets in more natural light, its GreenGuard Gold and Forest Stewardship Council certification ensures that it meets strict standards for indoor air quality and habitat-friendly wood. Most of the old furniture was donated to local community-based organizations (pictured with the donated furniture below), and the rest was recycled.



Metro refreshes the Integrated Pest Management Plan

Metro adopted an updated Integrated Pest Management Plan that includes new tools, processes and resources for staff and contractors to manage pests effectively with the least possible harm to people, property and the environment.



Water quality gets a boost at Blue Lake Regional Park

As part of improvements to the maintenance yard and fuel station at Blue Lake Regional Park, the Parks and Nature department installed bioswales that treat stormwater from all impervious surfaces, and added a containment system to prevent contamination of the drinking water aquifer if a fuel spill or leak were to occur.



Metro facilities give plant trimmings to Zoo for animal browse

Through a collaboration that started in spring 2016, trimmings from landscape pruning at Blue Lake Regional Park, Metro Regional Center and other Metro sites are collected and delivered to the Oregon Zoo, where animals consume the vegetation.



SDS Search Log In Reports Warehouse Search Resources Support

Toxic Assessment Tool

Calculator | November 20, 2017 | v1.0 | v1.0

SDS #100496	Lacquer Thinner	HIGH
Health		HIGH
Environment		MEDIUM
Physical		HIGH
Bioaccumulative		NONE
Inherently Toxic		YES
Persistent		YES
Summary		HIGH
Data Quality		GOOD
Ingredients		

Note: Please click on the orange arrows to expand or contract details for a section.

Most toxic chemicals targeted for removal

As part of an updated inventory of chemical products at Metro facilities, facilities staff focused on eliminating the most toxic products, called the "worst of the worst", as well as other hazardous products that are no longer needed.

Green teams take action across Metro

Metro green teams implemented several sustainability projects in FY 2016-17:

Property and Environmental Services/ Parks and Nature green team led a “Know Idle” campaign to eliminate unnecessary idling of Metro vehicles and the resulting health, environmental and economic impacts. The team also installed an electric hand dryer at Borland Field Station to reduce paper towel waste.

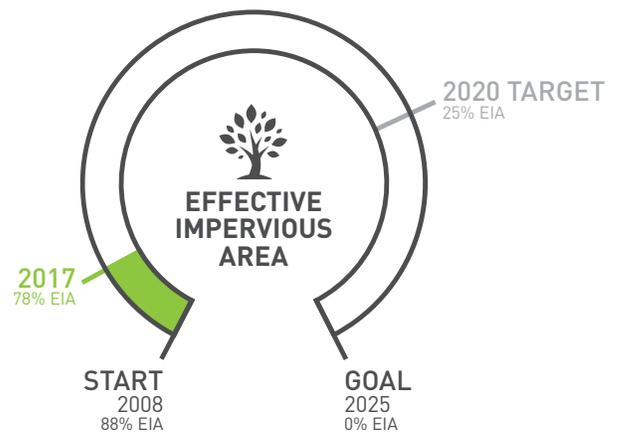
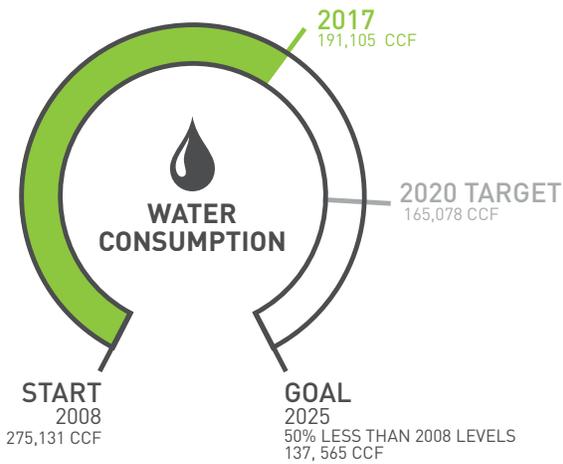
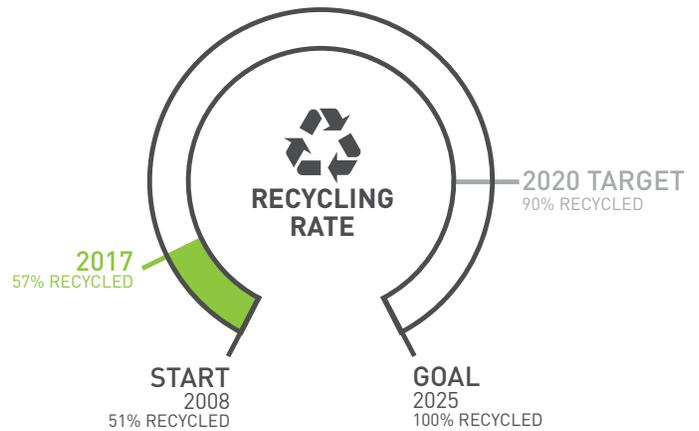
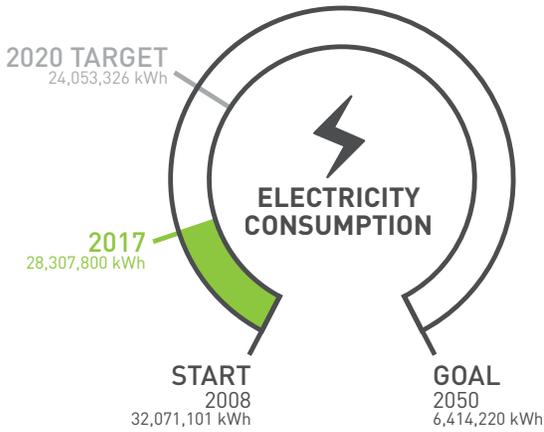


- Oregon Convention Center green team refreshed its recycling signage and event sustainability stations.
- Portland’s Centers for the Arts green team purchased reusable water bottles to reduce waste.
- Glendoveer Golf and Tennis Center green team added seven new recycling stations.
- Metro Regional Center green team hosted the 2016 EcoChallenge and an LED lighting fair.



Sustainability scorecard

FY 2016-17



CCF: Hundred cubic feet, equivalent to 748 gallons
EIA: Effective impervious area

Sustainability scorecard

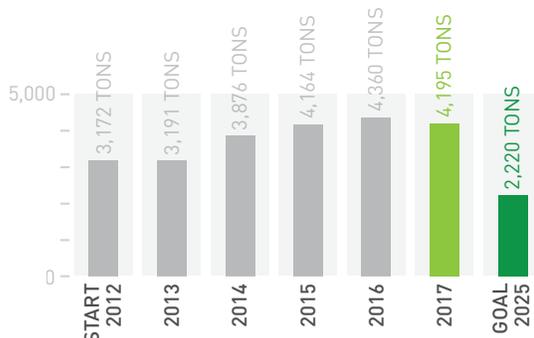
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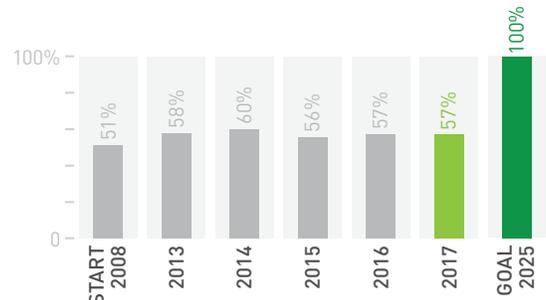
ELECTRICITY CONSUMPTION



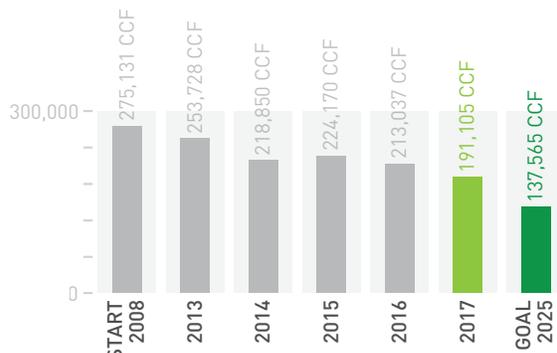
TOXIC INVENTORY



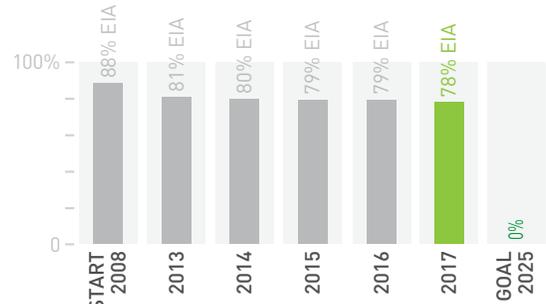
WASTE GENERATION



RECYCLING RATE



WATER CONSUMPTION



EFFECTIVE IMPERVIOUS AREA

CCF: Hundred cubic feet, equivalent to 748 gallons
EIA: Effective impervious area



Conclusion

This report highlights just a portion of the work done in fiscal year 2016-17 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.

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.



Sustainability steering committee

A steering committee of representatives from Metro's major facilities, venues and key departments provides oversight and accountability for implementation of the Metro Sustainability Plan.

2016-17 members were:

- Julie Bunker and Ed Williams, *Portland's Centers for the Arts*
- John Sterbis and Rick Hanes, *Oregon Zoo*
- Ryan Harvey and Matthew Uchtman, *Oregon Convention Center*
- Chuck Dills, *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, *Property and Environmental Services, Construction Project Management Office*
- Rory Greenfield, *Property and Environmental Services, Metro Regional Center operations*
- Tracy Sagal, *Finance and Regulatory Services, Procurement Services division*
- Benjamin Rowe, *Finance and Regulatory Services*
- Jenna Garmon, *Sustainability Coordinator*

Green teams

Five green teams support implementation of sustainable practices in Metro workplaces.

The following Metro employees served as chairs of the green teams during FY 2016-17:

- Patrick Morgan and Sabrina Gogol, *Metro Regional Center*
- Sarah Vaca and Chelsea Althaus, *Property and Environmental Services/Parks and Nature*
- Matt Nicoll, *Portland's Centers for the Arts*
- Chuck Dills, *Portland Expo Center*
- Carolyn Sherman, *Glendoveer Golf and Tennis Center*
- Ryan Harvey, *Oregon Convention Center*