



Sustainable Buildings and Sites Policy

Overview for Operations and Maintenance

The Sustainable Buildings and Sites Policy sets standards for the design, construction, operations, and maintenance of Metro buildings and developed properties. This document focuses on operations and maintenance of buildings and parks. All requirements apply to buildings of any size unless otherwise noted, and to parks beyond their buildings only as applicable. Separate overview documents cover the policy's requirements for new construction and major renovations and requirements for infrastructure and interiors projects.

Operations

- Recycling
 - Separate all recyclable paper, cardboard, glass and plastic bottles and jars, and aluminum and tin cans
 - Provide receptacles with accurate signs for work areas
- Food waste
 - Separate food waste from all other solid waste for collection
 - Recover food waste that is controlled by the business, agents, and employees
- 100% renewable electricity
 - Procure 100% renewable electricity through purchase or onsite generation
- Toxics reduction policies/procedures
 - Develop and adopt operational policies and procedures that reduce the use of and exposure to toxins, including but not limited to:
 - a green cleaning policy with requirements for the use of third-party certified cleaning products such as Green Seal or EPA Safer Choice,
 - compliance with Metro's Integrated Pest Management Policy, and
 - additional strategies to maximize the use of safe alternatives to toxic materials.

Maintenance, repairs, and upgrades

The policy includes requirements for maintenance, repairs, and upgrades. These include standards for sustainable equipment and products, design and assessment requirements, and equity considerations.

Equipment/product standards

- Materials carbon reduction
 - Choose primary materials, furniture, equipment, and interior finishes with lower embodied carbon content as available and identified
 - Concrete pours shall comply with the city of Portland's Concrete Embodied Carbon Thresholds
 - Evaluate the use of MetroPaint before specifying finishes

- Lighting
 - Replace fluorescent light fixtures and lamps with high efficiency LED fixtures
 - Comply with bird-friendly design standards for lighting
- Appliances and equipment
 - Choose the most efficient option available (Energy Star if available)
 - Energy Trust of Oregon incentives serve as a minimum
 - Consider submetering
 - Consider total cost of ownership
 - Consider campus upgrade opportunities
 - Transition away from fossil fuels
- Water fixtures
 - Select EPA WaterSense certified
 - Alternative product allowed if lifecycle assessment demonstrates better performance

Design and assessment (may include capital improvement plan projects)

- EV infrastructure
 - Plan for investment and installation of electric vehicle infrastructure
 - Renovation and system upgrades to infrastructure and/or parking projects must include pre-installation or installation of wiring and connections to support EV charging
- Fossil fuel reduction
 - Reduce fossil fuels and fossil fuel combustion through efficiency and replacement with less, or non-emitting renewable or low-carbon alternatives
- Bird-Friendly Design
 - These requirements prevent bird injury and mortality from the built environment and apply if:
 - The project includes one or more structures with a footprint of more than 500 square feet
 - The project includes one or more monopole structures
 - The project includes one or more wind energy facilities
 - The project involves a change to 25% of an existing building façade with exterior alterations
 - The project involves installation of trail or building lighting, glass railings or exhibit windows, a glass corridor/walkway, etc.
 - Exemptions are allowed when accidents, severe weather events, and other emergency situations require immediate replacement of existing glass and infrastructure
- Sustainable Roof Requirement
 - Roofs 1,000 square feet or more will be evaluated upon replacement or LEED assessment for the most suitable roof option:
 - Solar power generation – highest priority due to clean energy generation
 - Ecoroof – next-highest priority to mitigate storm water, provide habitat and combat heat island effect
 - High reflectance roof – lowest priority; combats heat island effect

- Tree replacement requirements
 - For all capital improvement projects on Metro property other than parks and natural areas, avoid tree removal to the extent feasible. If live tree removal occurs, the tree replacement requirements apply unless local jurisdictional requirements exceed them.
- Urban heat island mitigation
 - Design buildings and landscapes to minimize urban heat island effect, including use of:
 - Urban heat island mitigation strategies in landscaping design
 - Cool roofs and green roofs
 - Cool pavement and wall strategies

Equity considerations

- The following equity actions relate to building operations and maintenance:
 - Ensure buildings and parks are welcoming to staff, the public, and all Metro constituents, including strategies like signage in multiple languages.
 - Ensure buildings and parks are accessible and inclusive to people of all abilities and include accessibility features for those with mobility, hearing, or vision needs.
 - Pursue opportunities to enhance equity in contracting and advance workforce diversity.
 - Respect culturally significant areas and honor the history of the original inhabitants of the land.

Certifications

Existing buildings will go through an evaluation and prioritization process to identify the highest level of LEED Operations and Maintenance (O+M) that they are eligible for, or an alternative certification if LEED is inappropriate for the building. Buildings will pursue higher levels or additional certifications over time. Existing parks will undertake a community engagement process to identify which parks are most appropriate to pursue Salmon-Safe certification.

Energy efficiency plan

All occupied Metro buildings larger than 10,000 square feet shall develop an Energy Efficiency Action Plan. The plan should include:

- An audit: Complete a Level I, II, or III energy audit of the building using the American Society of Heating, Refrigerating and Air-Conditioning Engineers standard (ASHRAE) for Energy Survey and Engineering Analysis every ten years, after a major renovation, or upon change to two or more systems. If Energy Trust of Oregon (ETO) provides funding for energy audits, the ETO audit process is acceptable.
- Energy efficiency measures: Compile a prioritized list of energy efficiency measures (EEM) appropriate to the building, such as upgrades or replacement of:
 - lighting,
 - heating, ventilation and cooling (HVAC),
 - insulation,
 - motors,
 - or any custom measures unique to the facility as identified during an energy audit.

- Integration of EEM into the building capital improvement project and renewal and replacement project lists.
- Tracking of utility usage through Metro's Energy Manager database.
- Management of plug load and occupant energy use through best practices for energy conservation including:
 - implementation of building energy policies,
 - installation of lighting sensors,
 - automatic electrical outlet shutoffs,
 - turning off all non-essential lights, computers, and monitors during non-business hours,
 - reducing phantom or standby power use, and
 - restricting excessive use of personal appliances.

Materials carbon reduction

Standards and guidance for the procurement of low carbon materials will expand over time. These standards address primary materials, furniture, equipment, and finishes. The standards require materials with at least 20% less embodied carbon than baseline average materials.