

	DEPARTMENT OF ADMINISTRATIVE SERVICES POLICY MANUAL ISSUING DIVISION: FACILITIES DIVISION	NUMBER 125-6-010
APPROVAL: Bill Foster, Acting Administrator		EFFECTIVE DATE November 1, 2004
SUBJECT: Sustainable Facilities Standards and Guidelines		PAGE 1 OF 5

AUTHORITY: Executive Order No. EO-00-07; Executive Order No. EO-03-03; ORS 184.421 through 184.470

PURPOSE: This policy implements the facilities portion of Governor's Executive Order Numbers E0-00-07, as well as EO-03-03 and ORS 184.421 through 184.470. It covers standards for siting, design, construction, operation and maintenance of state buildings and state leased buildings.

APPLICATION: Agencies that own, operate, or lease Buildings as defined under this policy.

DEFINITIONS:

Agencies Executive Branch departments, boards and commissions, including the Oregon University System.

Base Building Profile A summary of data about a new building. The profile includes the systems, structure, and finishes that would have been planned without incorporating sustainable features.

Building A structure with a roof and walls that is constructed for permanent use and is heated or cooled.

Build-to-Suit Lease A state lease where the developer constructs a new building for the Agency.

LEED The Leadership in Energy and Environmental Design program of the U.S. Green Building Council.

Life-cycle Assessment (LCA) Looking at the full life of a product and its impact on the environment. This review would include the following steps: mining the raw material; refining and creating a finished product; hauling to the site; installing in the building; resources used during its life; and its final disposal.

Life-cycle Cost (LCC) Looking at the full life cycle of the product and the cost to have it in the building. This review would include: the first cost of the product; the cost to operate and maintain it; and the cost of disposing of it.

Major Renovation Replacement of most systems and finishes in a Building.

Rating System	The state-modified version of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED), Version 2.0 criteria.
Self-assessment	A careful review of the project by the project design team which assigns points based upon the rating system, without formal submission for certification to the U.S. Green Building Council.
SEED	The State Energy Efficiency Design program administered by the Oregon Department of Energy through OAR 330-130-0010 to 0080.
SPiRiT	SPiRiT is a program used by the National Guard Bureau that provides guidance for making sustainable design and development planning decisions. http://www.cecer.army.mil/SustDesign/SPiRiT.cfm
Statewide Program	A DAS Facilities Division program which collects data, reviews facility budget requests, and sets building and resource conservation standards for all Agencies.
Sustainability	Using resources in a way and at a rate that allows people to meet their needs and future generations to also meet theirs. It also means meeting environmental, economic, and community needs.
Sustainability Plan	A written document that records the Base Building Profile, the Self-assessment rating form, and the features that were added or subtracted from the base to reach the required point rating, including estimated costs.

POLICY:

- Building decisions must balance economic, environmental and community needs. Agencies should continually improve practices to make them more sustainable. A decision that is valid for one site and one point in time will likely change as products and product knowledge change.
- Sustainability may increase or reduce costs. Agencies should take the time and effort necessary to make sound sustainable building decisions. These decisions should be well documented.
- Agencies should choose building parts that are produced using sustainable technology. They should use reliable technology, avoiding untested systems, materials, and processes.
- Agencies should provide training programs for staff and project team members. Training should explain sustainability principles and provide a framework for decisions. It should explain how to keep project records for later review and analyses.
- Building decisions must consider the full life of materials. The review must include life-cycle assessment (LCA) and life-cycle cost (LCC) factors. The level of analysis should match the size of the project or decision. For energy consuming systems, part of the analysis for new state-owned buildings or major renovations shall include compliance with the Oregon Department of Energy's SEED program.

- At least per biennium, Agencies shall report their efforts to follow this policy. The reports shall go to the Statewide Program on forms or in formats defined by it. As a part of the report, DAS will collect some high level data about the benefits of the policy. This report shall be in conjunction with the biennial sustainability report required by ORS 184.423.

I. STANDARD FOR SITING, DESIGN, AND CONSTRUCTION OF STATE-OWNED BUILDINGS

Construction and operation of buildings use high levels of energy and resources. Care must be taken to create more sustainable state buildings. In starting each new building, the project team shall develop a Sustainability Plan. This plan will start with an assumed base building profile. A report will document features and costs that are added or subtracted from this base. The project team, which should include an accredited LEED professional, shall conduct a Self-assessment. The assessment shall be based on the state-modified version of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED), Version 2.0 criteria (see Appendix for detailed listing and score sheet). Buildings shall be designed to meet the point equivalent of a LEED Silver rating. The Oregon Military Department shall be considered in compliance with this policy if they follow the SPiRiT rating system developed by National Guard Bureau.

II. STANDARD FOR MAJOR RENOVATIONS OF STATE-OWNED OR BUILD-TO-SUIT LEASED BUILDINGS

Renovating buildings means dealing with some issues that are not part of new construction projects. Measures should create a more sustainable leased or owned building. Ensure that all measures are prudent and can show reasonable paybacks and economic benefit. The project team, which should include an accredited LEED professional, shall develop a Sustainability Plan. A report will document sustainable features and costs that are included in the design. The project team shall conduct a self-assessment based on a state-modified version of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED), Version 2.0 criteria (see Appendix for detailed listing and score sheet). Buildings shall be designed to meet the point equivalent of a LEED Certified rating. The Oregon Military Department shall be considered in compliance with this policy if they follow the SPiRiT rating system developed by the National Guard Bureau.

III. STANDARD FOR OTHER LEASED BUILDINGS

The buildings the state leases around Oregon have an impact on our resources and communities. When major tenant improvements or other modifications are needed for a leased building, the project team shall develop a Sustainability Plan. A report will document measures and costs that are added or subtracted from the building. Any sustainability measure that has a payback within the lease term shall be incorporated into the project. Leases in multi-tenant buildings or requiring few changes will not require a report.

IV. STANDARD FOR THE OPERATION AND MAINTENANCE OF STATE BUILDINGS AND LANDSCAPES

Sustainable building methods include more than design and the choice of parts; operation and maintenance also plays a critical role. Care must be taken that products and practices used to maintain the building are sustainable. Operating and maintenance practices need to ensure all systems continue to function as designed. Scheduled maintenance and cleaning should support energy efficiency and promote the health and comfort of occupants. Agencies shall develop a maintenance plan that shows how they will include sustainable methods. The plan shall be updated each biennium. The maintenance plan shall include actions to address the following areas:

Site

- Reduce contaminants in storm water by cleaning drains and increasing on-site infiltration.
- Use landscape maintenance methods that protect wildlife.
- Minimize or eliminate negative effects on air, land or water, both on and off-site.
- Support programs that promote carpools and car use reduction.
- Use organic fertilizers and natural techniques for insect control.
- Use landscape waste as natural soil amendments.
- Install light fixtures and limit their use to reduce light pollution.
- Recycle yard waste, which may include composting.

Water Efficiency

- Maintain landscape areas using the least water possible.
- Where possible, add flow reducers to minimize water use.
- Educate building occupants and monitor water consumption.
- Increase the amount of unpolluted water returned to below ground supplies.

Energy & Atmosphere

- Monitor building systems for efficiency. Look at updating systems with more efficient equipment.
- Establish a plan for regular maintenance of building systems.
- Start education programs that encourage staff to turn off energy using devices.
- Add energy saving measures when possible.
- Clean windows regularly to preserve good day lighting.
- Review energy consumption quarterly. Confirm correct operating hours. Check peak usage patterns, fixture performance, and maintenance methods. Develop energy profiles to find peak loads.
- Install point-of-use water heaters where practical. Limit the use of re-circulating water systems to times when occupied.
- Set the hot water temperature as low as possible (110 degrees Fahrenheit). In food service areas use a booster heater.
- At the end of its useful life, replace equipment with ozone reducing chemicals. Replace with the best choice available to minimize harm to the atmosphere.
- Install equipment that uses ozone-friendly fuel sources.

- When feasible, purchase green power from reliable energy providers.

Materials & Resources

- Put central recycling systems in place to promote waste management ease.
- Seek materials, equipment, and furnishings to use in buildings that have: the highest recycled content; contain high levels of rapidly renewable materials; have the most benign ingredients; can be recycled; are durable; and, come from local sources.
- Ensure new materials are essential and seek alternatives to virgin materials.
- Purchase supplies in bulk containers to lessen packaging waste.
- Ask vendors to take back shipping containers, pallets, and other packaging materials.
- Establish a building maintenance program. In the program, develop a way to measure maintenance and commit to basic performance standards.
- Seek ways to use salvaged wood or recycled plastic lumber on carpentry projects.
- Look into reworking current furniture systems instead of buying new. Also, consider reworked furniture rather than new.

Indoor Environmental Quality

- Meet or exceed indoor American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) on air quality standards in buildings. Provide tools to check carbon dioxide levels and confirm fresh air levels.
- Stop bad odors and hazardous chemicals from entering air systems.
- Avoid using materials having high volatile organic compound (VOC) levels.
- Establish environmental and packaging guidelines for cleaning products.
- Select cleaning products that are low in VOC's and moderately acidic or alkaline.
- Inspect ventilation ductwork to be sure no freestanding water, mold, or mildew is present.