DAS DEPARTMENT OF ADMINISTRATIVE SERVICES **INTERNAL POLICY**	**NUMBER** 107-01-001	**SUPERSEDES**
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DIVISION Enterprise Asset Management	**REFERENCE/AUTHORITY** Executive Order 17-20 DAS Statewide Policy: 107-011-010	
POLICY OWNER Operations and Maintenance Program		
SUBJECT Energy Management	**APPROVED SIGNATURE** Katy Coba, DAS Director | Chief Operating Officer *Signature on file with DBS Policy Coordinator*	

PURPOSE

Manage energy strategically to benefit agency operations and decisions, support customers and staff, conserve resources and reduce greenhouse gas emissions. Set and pursue energy efficiency and reduction goals for DAS-owned buildings, minimize other impacts on the environment and provide productive and healthy work places. Guide design of new DAS buildings to be carbon-neutral ready. Lead by example to achieve a more cost-effective and clean energy future. Realize net financial savings over the life of energy efficiency measures, in particular as energy efficiency technology continues to improve. Support the DAS Strategic Plan vision to implement cost-effective, efficient, and sustainable policies and practices, and to continuously improve.

APPLICABILITY

All DAS staff. While this policy does not apply to tenants in DAS-owned buildings, DAS staff will educate and collaborate with tenants to achieve the policy's goals and follow its guiding principles.

REFERENCE

- The policy is consistent with and supports implementation of Executive Order 17-20, Accelerating Efficiency in Oregon's Built Environment to Reduce Greenhouse Gas Emissions and Address Climate Change.
- This policy complements the DAS Statewide Resource Conservation Policy, 107-011-010.
- The DAS Strategic Energy Management Action Plan, which is annually reviewed and updated by Enterprise Asset Management, Operations and Maintenance, will also set forth specific actions to achieve this policy's goals.

DEFINITIONS

ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers): An organization devoted to the advancement of indoor-environment-control technology in the heating, ventilation and air conditioning (HVAC) industry.

ASHRAE Standard 100: Provides the minimum requirements for energy efficient design and operation of existing residential, commercial, institutional and industrial buildings.

ASHRAE Standard 189.1: A standard for the design of high-performance green buildings. The first comprehensive green building standard written in mandatory code language.

Climate neutrality: A facility has no net climate impact resulting from carbon or other greenhouse gases. This can be best achieved through a hierarchy of actions that include aggressive reduction of energy consumption, followed by conversion to low or no impact energy sources, and finally through carbon offsets.

Energy efficiency: Using technology that requires less energy to perform the same function. Using a compact fluorescent or light emitting diode (LED) light bulb that requires less energy instead of using an incandescent bulb to produce the same amount of light is an example of energy efficiency.

Energy conservation: Any behavior that results in the use of less energy. Turning the lights off when leaving the room and recycling aluminum cans are both ways of conserving energy.

EnergyCAP: A software that allows organizations to track energy and other resource use from utility bills.

ENERGY STAR Portfolio Manager: A free web-based tool created by the U.S. Environmental Protection Agency to help users track and improve energy efficiency across an entire portfolio of buildings.

Energy use intensity: Energy use per square foot at a property (energy divided by square foot).

Life cycle costing/total cost of ownership: Sum of all recurring and one-time (non-recurring) costs over the full life span or a specified period of a good, service, structure, or system. In includes purchase price, installation cost, operating costs, maintenance and upgrade costs, and remaining (residual or salvage) value at the end of ownership or its useful life.

Greenhouse gas: Any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere.

Net zero energy: The amount of fossil-fuel generated energy consumed on-site is balanced by the same amount of renewable energy produced either on-site or elsewhere to power the building.

Renewable energy: Energy that is collected from resources that are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.

SEED: The Oregon Department of Energy's State Energy Efficient Design Program. The SEED Program, established in 1991, requires state agencies to build new or renovate existing buildings using energy efficient design methods.

EXCLUSIONS AND SPECIAL SITUATIONS

- Energy use and management associated with disasters or emergencies.
- Energy management in buildings under 5,000 square feet.
- Energy management in DAS-owned buildings at the State Fair Complex.
- Energy management in buildings for sale or scheduled for demolition.

POLICY GUIDELINES

Goals

By 2022, every DAS building subject to this policy will meet or exceed the energy use intensity (EUI) targets, normalized for weather, appropriate to each building type and climate zone in the ASHRAE 100 Standard. Where no ASHRAE 100 Standard exists for a given building type, DAS will develop and meet a custom five-year EUI target.

For buildings that already meet the ASHRAE 100 Standard, where feasible DAS will keep buildings on a track of continuous year-over-year EUI improvements.

Attachment A lists the DAS buildings to which this policy applies.

Goals will be pursued through a combination of actions, including:

- Capital improvements
- Building "tune-ups" (re-commissioning, retro-commissioning) and optimizing performance of existing equipment
- Staff and tenant engagement and behavior change

DAS will design and construct new buildings used primarily for office and other commercial work space to be able to operate as carbon-neutral buildings defined with full fuel-cycle considerations that are inclusive of, but not limited to, off-site renewable energy and other provisions of ASHRAE Standard 189.1.

Over the long term, DAS will actively seek opportunities to achieve net zero energy and climate neutral ready buildings in its portfolio across the state.

Actions

- Consider opportunities to save energy and use it more efficiently in all major agency projects, programs, purchases and decisions.
- Maintain a commitment from DAS leadership to support strategic energy management and energy efficiency and conservation.
- Clearly and consistently communicate the case for energy efficiency and conservation, including environmental stewardship, financial return, safety and employee productivity.
- Pursue energy efficiency and conservation opportunities in all aspects of energy use including but not limited to heating, cooling, ventilation, water heating, lighting, data management and storage, office equipment and plug loads and behavior change.
- Make energy management an active and continuous process, employing the "Plan, Do, Check, Act" model of continuous improvement consisting of:
    - Maintaining an active internal energy team with clear roles and responsibilities
    - Creating annual energy management work plans to make progress on goals
    - Executing on work plans
    - Checking progress, including where applicable measurement and verification of results and regularly documenting energy outcomes (energy savings, costs, return on investments, rebates and incentives)
    - Revising programs and work plans to more effectively work toward goals
- Lead by example by actively sharing information, tools and lessons learned with other agencies.
- Foster a culture of awareness, involvement and accountability for energy efficiency and conservation among DAS staff and share this culture with customers.
- Use energy life cycle costing and total cost of ownership and operation to guide short-term and long-term decisions and investments in energy efficiency and conservation.
- Consistently identify and leverage available local, regional, state and national resources - including technical and financial assistance, rebates and incentives – in all eligible projects to achieve energy goals.
- Regularly communicate outcomes including energy program projects, milestones, energy and cost savings, and greenhouse gas reductions from energy management with DAS leadership, staff and customers.

Data and Performance Metrics

- Track energy consumption and spending by individual building, by month and annually, using software tools. These data will be uploaded to ENERGY STAR Portfolio Manager.
- Track metrics on individual energy projects including estimated costs, savings, payback and applicable incentives/rebates.
- Normalize building energy use data for weather, and track EUI per building square foot for each DAS building.
- Employ sub-metering to help discern data trends.

Updates

- Revisit this policy at least every two years and update it as appropriate.

ATTACHMENT A: DAS BUILDINGS SUBJECT TO ENERGY MANAGEMENT POLICY

550 Capitol

Agriculture

Albina Office

Archives

Blind Commission

Central Point Crime Laboratory

Commerce

DEQ Health Laboratory

Employment

Eugene State Office

Executive

General Services

Human Services

Justice

Labor & Industries

Maintenance Shop

North Mall Office

Pendleton State Office (Old)

Pendleton State Office

Portland Crime Laboratory

Portland State Office

Print Plant

Public Service

Real Estate

Revenue

Salem Motor Pool

State Data Center

State Library