Rogue Community College

Energy Program

Contents

Background

Rogue Community College is committed to conserving natural resources while continually improving the quality of its educational programs. Recent renovation and construction projects, as well as upgraded mechanical and electrical systems, have improved building operating efficiencies. These College Operation Guidelines have been established for school employees and all building users to manage and control the amount of energy and resources needed to operate College facilities.

Mission/Purpose

Rogue Community College is committed to continually improving our energy performance and reducing energy costs. One of the College's core values clearly states the importance of stewardship, which commits us to responsible and thoughtful guardianship of our human, economic, environmental, and cultural resources. To fulfill the mission and embody much of this core value, the College strives to improve energy management within our operations and work toward energy-efficient best practices where cost effective. Additionally, this ensures we are responsible consumers of natural resources, protecting the environment both locally and globally.

Scope and Keys to Success

The College Operation Guidelines supersede all previous instructions, but shall not supersede the need to maintain a safe and secure environment for staff, students, and campus visitors. This program was put into place in order for the College to establish a culture of conservation. Leadership, involvement, and focus are required from all College personnel in order to achieve this culture. This program should be used to guide the behavior of every building occupant with regard to energy consumption during day-to-day operations.

Energy Performance Metrics, Goals and Objectives – Specific, Measurable, Attainable, Relevant, Timely

Metrics

1. Energy consumption will be measured in kWh per building where possible. For those campuses where this is not possible, energy will be measured in kWh per campus.
2. Campuses are to be sub-metered in order to track energy usage per building where possible.
3. Energy use reduction will be measured from a 2018 baseline.

Goals

1. Rogue Community College will work to reduce its collective electricity usage by 10 percent by 2023.

   The College will work toward all Campuses reducing electricity usage two percent annually over five years. The College measures our electrical energy consumption in kWh. Our specific objectives are as follows.

Objectives

1. Work with the Energy Trust of Oregon's Strategic Energy Management program to establish an energy use baseline for each College campus, and to help build a foundation for continuous energy savings.
2. Monitor and reconcile all utility billings. Any areas of increased energy and water consumption will be investigated to ensure applicable corrective measures are taken.
3. Evaluate each College campus to identify future energy efficient improvement opportunities.
4. Establish an energy and waste campus inspection program to give feedback to each College campus.
5. All capital projects and purchases will take energy efficiency and environmental impact into account.
6. Establish a champion at each campus to promote and support the College's conservation efforts.
7. Increase every campus's resource conservation participation through education and feedback.
8. Each College campus will become Energy Star Certified through the EPA's Energy Star Portfolio Manager.
9. In partnership with the College's Public Information Officer, the College will capitalize on public relations opportunities to disseminate our message and highlight the College's conservation efforts to the community.

Strategic Energy Management (SEM) Program

In 2015, Rogue Community College began participating in the Energy Trust of Oregon's Commercial Strategic Energy Management program. By participating in this program, Rogue Community College receives technical support and state-of-the-art tools and templates, along with campus assessment support and training from energy experts. This program is funded by Pacific Power, so there are no costs associated with enrolling in it, other than the time required from the College's Energy Champion, Executive Sponsor, and team representative from each campus. Typical participant reductions in annual energy costs are between five and 10 percent.

The SEM Team will consist of the following:

Energy Champion: Redwood Campus's Facilities Office Coordinator serves as the Energy Champion. Duties include: tracking and monitoring facility energy performance, leading the implementation of action items, attending all required workshops and meetings, and chairing internal energy team meetings.

Executive Sponsor: The College's Director of Facilities and Operations serves as the Executive Sponsor. Duties include: providing management level support, developing goals and timelines, allocating budget and time for action item implementation, regularly reviewing energy performance and associated savings, and ensuring implementation of a successful plan.

Energy Team: A successful energy and resource conservation program requires an advocate at every campus. Each campus will provide one energy team member as the campus point of contact for this

program. Duties include: attending five workshops per year, assisting with implementation of this program, and providing feedback on program status. Preferred candidates for these positions will have strong campus leadership and a genuine interest in the field of Energy Conservation. The Energy Team meets monthly.

College Operation Guidelines

1. Heating/Cooling

a. The indoor temperature range is to be 68 – 74 degrees Fahrenheit during the period a space is occupied and 60 – 80 degrees Fahrenheit during all unoccupied periods, breaks and holidays included.
b. Shut off power to A.C.-only equipment and set building heat pumps to "unoccupied" for winter break.
c. If you believe your zone is outside of the above parameters, contact Facilities. They will take a temperature reading with the College-supplied thermometer (at the thermostat). If the zone temperature is determined to be outside the acceptable thresholds outlined above, then a work order must be submitted for maintenance to address the issue.
d. Main distribution frame (MDF) and Intermediate distribution frame (IDF) room thermostats shall be set to 70 degrees at all times year-round.
e. Facilities, custodial and contracted work will be carried out at the space's ambient temperature except for special considerations.
f. Tampering with or manipulating the thermostats to make the HVAC system operate when conditions are within the College's temperature set points is prohibited.
g. All doors and windows shall be closed when the HVAC system is on to prevent loss of conditioned air. This includes both interior and exterior doors and windows. Propping doors open to compensate for temperature variations wastes energy unnecessarily, increases operating costs, and stresses equipment. If there is a legitimate issue that is confirmed by the facilities zone-temperature measurement, a work order must be submitted. An exception to this rule is a one-on-one student/instructor conversation where the door must remain open.
h. If doors are to remain open, only approved door hold devices shall be used.
i. Dress appropriately for the weather and have additional clothing available in case you are too cold in your space. During the cold season it is advisable to use many thin, warm layers rather than a few thick layers since it will insulate better and allow for removal of layers if the temperature climbs.
j. Supplemental electric heaters shall be provided by Facilities if the building system is not functioning properly. Personal space heaters can be a safety hazard and can cause issues with the operation of heating and cooling systems. Personal space heaters must have management approval and have an automatic shut off switch.
k. Supply and return air vents in all areas must remain unobstructed at all times.

2. Lighting

a. Lights will only be on in spaces that are occupied. Always turn lights off when leaving the room.
b. Many spaces have occupancy sensors to turn lights off automatically; these sensors should be used as a backup only, meaning lights should be turned off manually whenever exiting a non-occupied room, even when occupancy sensors are present. Emergency and security lighting will remain on.
c. The use of natural day lighting is recommended whenever possible.
d. For the security of employees, all outside security lighting will be turned ON prior to scheduled staff arrival pending weather and daylight conditions. When feasible, exterior lighting will be reduced after 11:00 P.M.

3. Water

a. Water consumption should be minimized wherever and whenever possible.
b. Low flow toilets, showers, and faucets shall be utilized whenever possible.
c. Water should not be left running and unattended.
d. All plumbing leaks, dripping faucets, constantly running toilets and broken sprinkler heads shall be immediately reported to the Facilities Department via a phone call to the Facilities Office at ext. 7333.
e. Water heaters shall be set to 120 degrees.
f. Irrigation systems will be monitored to minimize water usage.
g. When spray irrigating, water shall not hit the building or pavement.
h. Reducing high-water landscaping with xeriscaping (landscaping that reduces or eliminates the need for supplemental water) will be evaluated at all campuses and will be incorporated in all new construction and renovation projects.

4. Equipment

a. Computer power management software shall be enabled to minimize the consumption of electricity when computers are not in use. This excludes servers. This power management automatically puts the hard drive and monitor into sleep mode, allowing computer to stay on without wasting electricity. Please log out (do not shut down) at the end of your work day.
b. Copiers, printers, and other peripheral equipment should be turned off when not being used and at the end of the day (fax machines excluded).
c. Network equipment, including network printers, should remain on.
d. Main distribution frames (MDF) and Intermediate distribution frames (IDF) shall remain plugged in at all times.
e. All printers will be set to go into power save mode after 15 minutes where possible.
f. The College shall provide “common space” appliances in staff lounge/break rooms. In buildings that do not have separate break rooms, placement of appliances will need campus management approval. Additional appliances result in increased risks of overloading electrical circuits, as well as increasing the College’s energy usage and

demand, resulting in additional energy costs. Personal appliances also create safety hazards if commercial Underwriters Laboratory (UL) ratings are not met, or if they are not properly maintained.

1. College provided appliances for "common spaces" may include refrigerator, microwave and coffee maker.
2. Staff-provided appliances with campus management approval may include individual coffee pots, regular toasters and personal space heaters that have automatic shut off switches.

g. All appliance purchases shall be preapproved by the Facilities Director or designated Facilities representative who will notify the Contract and Procurement Office of the approval. New appliances shall be Energy Star-rated whenever possible. Appliance donations are a potential safety hazard due to used equipment frequently being damaged, worn, or defective. This usually results in the College having to dispose of faulty appliances. All donations must be processed through the RCC Foundation and the Contract and Procurement Office, approved by the Facilities Director or designated Facilities representative, and will only be approved by exception.
h. During All College Breaks and over weekends, all staff are asked to be mindful and turn off all non-essential equipment prior to leaving as part of campus closure.

5. Facilities Usage

a. Facility use will be consolidated as much as possible, particularly during summer months, so most buildings can be completely shut down when unoccupied.
b. Activities shall be strategically grouped within facilities in order to optimize HVAC savings.
c. All after-hours HVAC needs will be evaluated and assessed by the Facilities Department based on usage and weather conditions.

6. College Vehicles

a. Employees should always take the shortest route possible to their next work stop. They should map out their workday to be fuel-efficient (i.e. with as little backtracking as possible).
b. Ensure that work vehicles are stocked with required tools, equipment, and necessary items in order to limit unnecessary travel.
c. College vehicles should not be left idling for more than 10 seconds. According to American Society of Mechanical Engineers (ASME), 10 seconds of idling uses more fuel than restarting the car.
d. Fuel efficiency will be a significant factor in the selection of vehicles purchased by the College.
e. When possible, multiple employees traveling to the same facility for meetings and other events should carpool.

Recycling

Rogue Community College is committed to being a good steward of the environment, using materials in the most efficient manner possible, and promoting environmental stewardship to students, staff and the community. This obligation shall require all Rogue Community College facilities to recycle to the maximum extent practicable in an effort to reuse or reduce limited natural resources.

1. Currently, only corrugated cardboard and paper from confidential shred bins can be collected from the College for recycling. Each campus has a cardboard collection bin. Facilities may be contacted to pick up your flattened cardboard boxes.
2. Each campus should identify alternative solutions to reduce volumes of materials used.
3. Show discretion when printing documents; ask yourself if you really need to print it. Use double sided printing whenever possible.
4. Choose paperless communication, transactions, and publications whenever possible.
5. Re-use resources, such as office supplies (paper clips, rubber bands, (relabeled) file folders, etc.), whenever possible.
6. Recycled electronic waste (computers, monitors, fax machines, etc.) will be managed by Risk Management.
7. Recycled construction debris, carpet, and ferrous and non-ferrous metals will be managed by Facilities.

New Construction and Renovations

1. All future Rogue Community College construction, remodeling, renovation, and repair projects will be designed with consideration of optimum energy utilization, low life-cycle operating costs, and compliance with all applicable energy codes.
2. The College will require high performance energy systems in new construction and renovation projects when the systems are determined to be life cycle cost-effective.
3. Renewable energy technologies, day-lighting and passive solar energy are to be incorporated when feasible.
4. Utility sub-meters must be installed in new construction and renovated facilities to isolate and monitor energy and water consumption.
5. Interior lighting will be LED, whenever possible. New energy-saving fixtures, lamps and ballasts will be used to replace existing, less efficient lighting whenever economically feasible and appropriate. Ensure that all lights can be controlled to turn off.
6. Exterior lighting will be LED whenever possible, and will meet minimum current safety requirements. Decorative lighting will be kept to a minimum.
7. The College shall continue working with the Energy Trust of Oregon (ETO), to ensure that the College has taken full advantage of all grant and incentive opportunities available to the College through current programs. The College shall also monitor all future grant and incentive opportunities that would benefit the College in operations, equipment and renovation upgrades, through but not limited to Oregon Department of Energy (ODOE) and Avista.

Purchases

Environmentally Preferable Purchasing refers to the practice of specifying products with environmental attributes, such as reduced packaging, reusability, energy efficiency, recycled content, and rebuilt or remanufactured products to be included in bids and contracts.

1. Only Energy Star-rated electrical appliances and equipment will be procured unless there is no satisfactory Energy Star product available for purchase.
2. When Energy Star labels are not available, choose energy-efficient products that are in the upper 25 percent of energy-efficiency as designated by the Federal Energy Management Program.
3. Purchase of more expensive energy-efficient equipment can be justified when the extra cost is less than or equal to the resulting energy savings.
4. Purchase recycled materials when practical, taking into consideration the appropriateness, effectiveness and cost of the recycled products.
5. Incorporate energy conservation goals into specifications for contractors and vendors.
6. Reduce the use of disposable materials and use compostable or recyclable materials as appropriate.
7. Environmental factors to be considered in product and service acquisitions include, but are not limited to, the assessment of:
    a. Pollutant releases and toxins, especially persistent bio-accumulative toxins (PBTs), air emissions, and water pollution
    b. Waste generation and waste minimization
    c. Greenhouse gas emissions
    d. Recyclability and recycled content
    e. Energy consumption, energy efficiency, use of renewable energy
    f. Depletion of natural resources
    g. Potential impact on human health and the environment
    h. Impacts on biodiversity
    i. Environmental practices that vendors and manufacturers have incorporated into their office and production processes.
8. As much as practical, purchase materials and supplies with a minimum of packaging.

Inspection Program

Assessments will be conducted by the College's (SEM) Energy Champion throughout the year. These assessments will include updates on energy conservation projects and data collection on energy savings, and employee participation in energy conservation on campus. Upon completion of each assessment, a written report will be provided to the Facilities Director.

Performance Assessment

The College's (SEM) Energy Champion will submit a bi-annual report to the VP of College Services and the Facilities Director that outlines the College's current energy consumption, water usage, waste

stream conservation, procurement efforts and performance with regard to our current goals and objectives. This report shall also include an overview of recently completed projects that affect energy consumption, as well as details on any upcoming energy projects.

Communication

The support and participation of all members of Rogue Community College in implementing this procedure is key to the realization of our goals. This program shall be communicated to all newly hired employees as part of their new-hire orientation, and reminders will be sent to all employees on an annual basis. The program will also be available on RCC's intranet.

Review

This program shall be reviewed annually, first by the Facilities department, then the energy team, and finally, the Vice President.

_Curtis Sommerfeld _____ __April 22, 2020_____

Name Enactment Date

_VP of College Services_____

Title