



Greater efficiency supports patient care.

Personal Refrigerators, Heaters and Coffee Makers

All ECM content was independently developed and reviewed to be vendor, product and service provider-neutral.

Description

Creating and enforcing policies regulating personal refrigerators, heaters and coffee makers will not only reduce the energy use in the facility, but it will also make a safer environment. Engaging the employees on energy efficiency can create a flywheel effect that will drive energy savings elsewhere.

Project Talking Points

- Personal refrigerators, heaters and coffee makers are large energy users, especially when scaled to dozens of employees.
- With no policy in place, there is the potential for unsafe products to be introduced into the facility (e.g. older personal heaters without a tipping shutoff, creating a fire hazard).
- Personal refrigerators will run 24 hours a day, seven days per week, while heaters and coffee makers can be mistakenly left on at night and/or over weekends, wasting energy.
- Provide ENERGY STAR®-rated, larger refrigerators and/or coffee makers for employee use.
- ENERGY STAR does not currently label or plan on labeling any personal heaters.
- Full-size refrigerators are more efficient than mini refrigerators on a per square foot basis.
- Heat emitted from these personal appliances will increase the load on the building heating, ventilation and air conditioning (HVAC) system.
- If there are uncomfortable areas of the building where personal heaters are prevalent, investigate the root cause and make the necessary adjustments.

Triple Bottom Line Benefits

- **Cost benefits:** Eliminating personal equipment will result in energy reduction and, as a result, cost savings.
- **Environmental benefits:** Reducing energy in the facility will reduce the overall carbon footprint. Older personal refrigerators can use banned, harmful refrigerants.



Greater efficiency supports patient care.

- **Social benefits:** Reductions in hospital operating costs will result in a decreased cost to consumers and more funding for patient care. There are over 25,000 residential fires and 6,000 burn injuries treated each year associated with space heaters. Reducing the prevalence of space heaters in the building will reduce the chances of an accident.

Purchasing Considerations

When/if choosing community refrigerators and/or coffee makers be sure to look for the ENERGY STAR label to get an energy-efficient model.

How-To

1. Engage the stakeholders. This will likely include facilities, safety, legal, purchasing and department heads.
2. Create a facility-wide policy on personal appliances such as refrigerators, heaters and coffee makers and an enforcement plan. Prepare department heads for conversations about appropriate seasonal attire if employees are cold in their work areas.
3. If these appliances have been prevalent in the facility, anticipate the potential displeasure and create a plan. Some examples include:
 - Survey employees on their preferred community coffee maker.
 - Survey employees on thermal comfort in their work areas.
4. Address any uncomfortable areas found during the thermal comfort survey and purchase community coffee makers and/or refrigerators.
5. Prepare literature explaining the facility's energy savings goals, as well as the costs and dangers associated with these personal appliances.

Case Studies

- Boston College, Chestnut Hill, MA
 - [Coffee Energy Audit](#)

Resources

- Consumer Reports: [A mini refrigerator can max out your utility bill](#)



Greater efficiency supports patient care.

- Department of Energy: [Portable Heaters](#)
- [Energyusecalculator.com](#)
- Mason, Washington Public Utility District 3: [Portable Electric Space Heaters](#)

Regulations, Codes and Standards, Policies

If your stakeholder team needs guidance on writing policies for personal appliances, it will be helpful to reference college dormitory policies.

ECM Synergies

- ENERGY STAR office equipment
- Establish a baseline for current energy consumption

ECM Descriptors

Energy

Category List:

- Building and Maintenance
- **HVAC**

ECM Attributes:

- Basic Device Upgrades

Improvement Type:

- Retrofit/Renovations
- New Buildings
- Operations and Maintenance

Department:

- Engineering/Facilities Management