

US EPA ARCHIVE DOCUMENT



OnCampus ecoAmbassadors

OnCampus ecoAmbassadors are college students who implement projects from EPA's partnership programs to help carry out the Agency's mission to protect human health and the environment. The program is open to ANY college student, regardless of program, age, or background. All interested students are encouraged to participate.

Did You Know?

- 9.4 million refrigerators and freezers, 4.5 million window air-conditioning units, and 950,000 dehumidifiers were disposed of in 2010.
- Disposing of a 20-year-old refrigerator could reduce your electricity bill by over \$115 per year.
- RAD-eligible appliance disposals have resulted in emissions reduction equivalent to NOT driving about 589,845 passenger cars for an entire year.
- The average old refrigerator (pre-1995) contains approximately:
 - 140 pounds of metal
 - 20 pounds of plastic
 - 3 pounds glass
 - 0.5 pound of used oil
 - Small quantities of PCBs
 - Small quantities of mercury
 - 1 pound of foam insulation
 - 0.5 pound of refrigerant

Learn More

For more information, please visit:
www.epa.gov/ozone/partnerships/rad/



Responsible Appliance Disposal: Appliance Collection Event

The Responsible Appliance Disposal (RAD) Program is a U.S. EPA voluntary partnership program that began in October 2006 to help protect the ozone layer and reduce greenhouse gas emissions through proper appliance disposal. Most old refrigerators, freezers, window air conditioners, and dehumidifiers use refrigerants or foam-blowing agents that deplete the ozone layer and harm the climate system. These appliances also contain recyclable materials and hazardous or toxic substances. RAD partners include utilities, retailers, local governments, state governments, manufacturers, universities, and other interested organizations. A RAD Appliance Collection Event provides students the opportunity to dispose of these appliances at their university during move-out.

Goals of a RAD Appliance Collection Event

- Encourage appliance disposal at your university using best environmental practices
- Prevent ozone layer depletion and reduce greenhouse gas emissions
- Minimize the release of hazardous and toxic substances
- Educate students about recyclable materials in refrigerators

If You're Interested In:

- Organizing events and meeting new people
- Encouraging environmentally responsible behavior
- Educating others about best management practices for disposing of RAD-eligible appliances
- Doing environmental cost-benefit analyses

... then a RAD Appliance Collection Event is for you!

See page 2 for a step-by-step checklist for a RAD Appliance Collection Event.



Taking Action

In 2010, the RAD Program conducted a small-scale refrigerator and freezer recycling program designed to benefit the tribal community of Yakama Nation. Through this short-term program, 192 refrigerators and freezers were collected and recycled using best practices. This resulted in the recycling of 30,336 pounds of durable materials that might have otherwise ended up in a landfill.

A RAD Appliance Collection Event is ideal for students pursuing degrees in environmental studies, engineering, business, sociology, public health, biology, chemistry, and communications.

Checklist for a RAD Appliance Collection Event

Follow the steps below to conduct a RAD Appliance Collection Event on your campus.

- 1. Identify RAD opportunities at your university.**
 Talk with your school administration and the facilities team to find out what is done with appliances that students discard at the end of the year. This information will help you plan and organize a RAD appliance collection event during move-out.
- 2. Identify nearby recyclers that meet RAD Program standards.**
 Find and contact one or more local appliance recyclers to determine whether:
 - Refrigerant is recovered and reclaimed or destroyed;
 - Foam is recovered and destroyed, or the blowing agent is recovered and reclaimed;
 - Metals, plastic, and glass are recycled; and
 - Polychlorinated Biphenyls (PCBs), mercury, and used oil are recovered and properly disposed of.
 Obtain estimates of disposal and pick-up costs for facilities that meet these four RAD Program requirements.
- 3. Receive approval from your administration.**
 Coordinate with the school administration and facilities team to set dates for the collection event and decide on the best drop-off locations.
- 4. Prepare for the event.**
 Consider the following logistics as you plan for your event:
 - Recruiting volunteers;
 - Coordinating with the appliance recycler to pick up the appliances;
 - Organizing space to store the collected appliances before facility pick-up; and
 - Advertising the collection event (involve the school and the appliance recycler in any advertising decisions).
 Check out the tips for successful events on the right.
- 5. Host the event.**
 Host the event according to your plans, making sure that appliances are sent to an appliance recycler that meets RAD Program standards.
- 6. Share your success.**
 Ask for a report from the appliance recycler on how many appliances were collected, how much refrigerant, foam, oil, PCBs and mercury were recovered, and how much of each recyclable material was kept out of landfills. Then, multiply the number of refrigerators recycled by 4.64 MTCO₂eq (metric tons of carbon dioxide equivalent). Determine the resulting emissions reductions by entering the result into EPA's Greenhouse Gas Equivalencies Calculator (www.epa.gov/cleanenergy/energy-resources/calculator.html). Share these results with the administration and the student body.
- 7. Fill out your completion form.**
 Record the information that you are required to report to EPA on the event completion form, including your name, date of the event, name of your college, a description of the event or events, the number of interactions (include any interesting comments), and additional comments.

Resources

EPA Websites
<p>RAD Program www.epa.gov/ozone/partnerships/rad Greenhouse Gas Emissions www.epa.gov/climatechange/emissions/</p>
EPA's Greenhouse Gas Equivalencies Calculator
<p>The greenhouse gas equivalencies calculator is useful for translating measurements into terms that are easy to understand. For example, a measure of kilowatt-hours of energy can be converted to the annual greenhouse gas emissions from an equivalent number of passenger vehicles. www.epa.gov/cleanenergy/energy-resources/calculator.html</p>
Tips for Successful Events
<ol style="list-style-type: none"> 1. Find a suitable space. 2. Put up posters to advertise the event. 3. Create a Facebook event. 4. Ask friends to spread the word. 5. Plan to have snacks available – find out if you can get donations. 6. Arrange for music at the event. 7. Arrive early to set up the space, including snacks and music. 8. Use sign-up sheets to record attendance. 9. Create a written summary of the event.
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EPA OnCampus Websites
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