

A RAD PARTNER FROM THE START

In 2007, one of the nation's leading home appliance retailers—Sears Roebuck and Co. (Sears)—became the first broadline retailer to partner with the U.S. Environmental Protection Agency (EPA) as part of the Responsible Appliance Disposal (RAD) Program. With over 2,500 retail locations and 38 distribution centers, Sears Holdings (the parent company to Sears) recognized the opportunity to make a large, beneficial environmental impact by becoming a RAD partner and providing customers with the ability to responsibly dispose of their refrigerated appliances. As a leader in the promotion of energy-efficient appliances, Sears' membership in the RAD program was a natural extension.

EPA's RAD Program is a partnership launched in October 2006 to protect the ozone layer, cut greenhouse gas (GHG) emissions, and benefit communities. The RAD Program recognizes partners that commit to collecting and disposing of old refrigerated appliances using the best environmental practices available and going above and beyond what is required by federal law.

The RAD Program invites utilities, retailers, manufacturers, local governments, universities, and other qualifying organizations to become partners. The RAD Program also invites states to become RAD affiliates to promote the program to potential partners and increase environmental benefits for their states and communities.

“Protecting the environment, and inspiring consumers to protect the environment, through avoided emissions from substances with high global warming and ozone depletion potential is important to us,” said Bill Hutchinson, President of Supply Chain. “We aspire to have a positive impact by mitigating climate change and to encourage our industry to do the same.”

TURNING VISION INTO REALITY: PROGRAM LAUNCH

Sears' RAD program began as a combined effort between Sears, appliance haulers, and utilities. By teaming with utilities that offer rebates on the removal of old, inefficient appliances from the electricity grid as part of Demand-Side Management (DSM) programs aimed at reducing electricity use through energy efficiency or conservation, Sears has been able to make their appliance recycling program cost-neutral. Sears first rolled out utility haul-away programs on the West Coast through a partnership with JACO Environmental (JACO) and the Sacramento Municipal Utility District (SMUD), involving two retail locations and one



Refrigerator band saw. Photo by Michael Dunham.
Image courtesy of JACO Environmental. © JACO Environmental

distribution center in 2008. Over time, Sears has steadily increased their partnerships with utilities, at a rate of about 15% year-over-year. Today, Sears partners with 60+ utilities, including 23 RAD Partners (see text box). An impressive 40% of its retail locations and 36% of its Market Delivery Operations have access to RAD haul-away, primarily on the West Coast and Northeast.

Through these partnerships, Sears has also been able to leverage the long-standing experience and expertise of utilities in the appliance collection and recycling business. In particular, utility partners have helped Sears launch training courses for its employees and establish contractual agreements with its third-party vendors to ensure that RAD standards are applied throughout the disposal process of refrigerated appliances.

Sears' utility partners that are RAD Partners:

American Electric Power (AEP) Indiana Michigan Power, AEP Ohio, Arizona Public Service, Baltimore Gas & Electric, City of Roseville, Commonwealth Edison, Consumers Energy Michigan, Dayton Power and Light, Delmarva Power, Gulf Power, MidAmerican Energy Company, National Grid, Pacific Gas & Electric Utility, PacifiCorp, Pepco, PNM, Puget Sound Energy, Sacramento Municipal Utility District, Snohomish Public Utility District No.1, Southern Maryland Electric Cooperative, UGI Utilities, and Vectren Energy Delivery.

How it Works

When a customer wants to dispose of an old refrigerated appliance at the time they purchase a new unit at a participating Sears store location, the Sears Home Delivery team picks up the appliance from the customer's home and hauls it to a Market Delivery Operation (MDO)—a distribution center for moving large items. Once at the MDO, appliances are held until they are transported to recycling facilities that work with RAD partners to ensure the responsible disposal of appliances. At the recycling facilities, ozone-depleting refrigerants and foam blowing agents are recovered from appliances and reclaimed or destroyed. Raw material components, including metal, glass, and plastic, are also recycled, which prevents GHG emissions associated with the generation of electricity that would have otherwise been needed to produce virgin materials.

Program Achievements

Since joining RAD, Sears has responsibly disposed of over 2.6 million refrigerated appliances, including:

- 2,352,909 refrigerator units
- 210,012 freezer units
- 12,439 air conditioners
- 1,620 dehumidifiers

The GHG emission savings achieved by Sears through the RAD program are equivalent to taking more than 832,500 passenger cars off the road for one year.



Sears' efforts have resulted in the avoided emissions of about 4 million metric tons of carbon dioxide equivalent (MMTCO₂eq). These environmental benefits from the program continue to drive Sears' participation in the RAD partnership. Since 2008, participation in and satisfaction with the Sears' RAD program has increased. Sears attributes this success to the simplicity of the haul-away process; the ease of transaction between the Sears' Home Delivery team and recyclers; and Sears' "one touch" approach, through which customers can get a new ENERGY STAR labeled appliance installed at the time their old unit is hauled away and disposed of responsibly.

EPA recently recognized Sears' contributions to the environment—including through the RAD partnership—by naming Sears a recipient of a 2016 ENERGY STAR Retailer Partner of the Year Sustained Excellence Award.

LESSONS LEARNED

In developing their RAD program, Sears needed to develop and implement common standards across multiple third-party vendors and engage sales associates across the many Sears locations and distribution centers. In particular, systems were needed to collect, transport, process, and track appliances through the entire disposal chain, as well as to meet utility partner requirements for online customer verification and in-store enrollment in applicable rebate programs. Sears sales associates also needed to understand the benefits of proper appliance disposal and be able to effectively articulate those benefits to customers in order to successfully market the program.

To address these issues, Sears developed a process that worked well at the front end—for its customers—and at the back end—for the diverse players involved in the disposal chain, including Sears' retail associates, utilities, and haulers. Sears

implemented its "one-touch" system that made the appliance pick-up and safe disposal processes seamless for its customers by establishing clear lines of responsibility at each point in the disposal chain, appointing primary points of contact, and formalizing expectations for the flow of information. Sears also took advantage of utility resources, such as utility field staff who trained its sales associates on the advantages of proper appliance disposal to enable them to effectively market the program at point-of-purchase. Finally, Sears engaged manufacturers to leverage their marketing channels and additional rebate dollars and is working collaboratively with them to develop de-manufacturing guidelines.

Sears also grew its program incrementally, as its foundation became stronger and communication channels became more established. In particular, Sears first developed their program on the West Coast, where levels of engagement in RAD-like programs among utilities and customers are greatest, and subsequently rolled out programs across the Midwest and Northeast. As Sears signed on more utility partners, other utilities gained interest, and Sears' program thus expanded. As Sears scaled up its program, the retailer continued to further streamline and improve the process.

Building on this momentum and the extensive experience gained, Sears plans to continue to grow its partnerships and its RAD program reach.

ADDITIONAL INFORMATION

For more information on Sears' RAD program, visit <https://searsholdings.com/corporate-responsibility/environmental-sustainability> or contact Paul Campbell at paul.campbell@searshc.com.

For more information about EPA's RAD Program, visit <https://www.epa.gov/rad> or contact Sally Hamlin at hamlin.sally@epa.gov or 202-343-9711.

