

Spring 2016 RAD Partner Meeting

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April 13, 2016



Agenda



- **RAD Updates**

- Program and partner achievements
- Addressing HFCs and how RAD fits in
- Recent and upcoming RAD activities

- **Group Discussion**

- Aligning RAD activities with partner needs
- Partner successes and program challenges



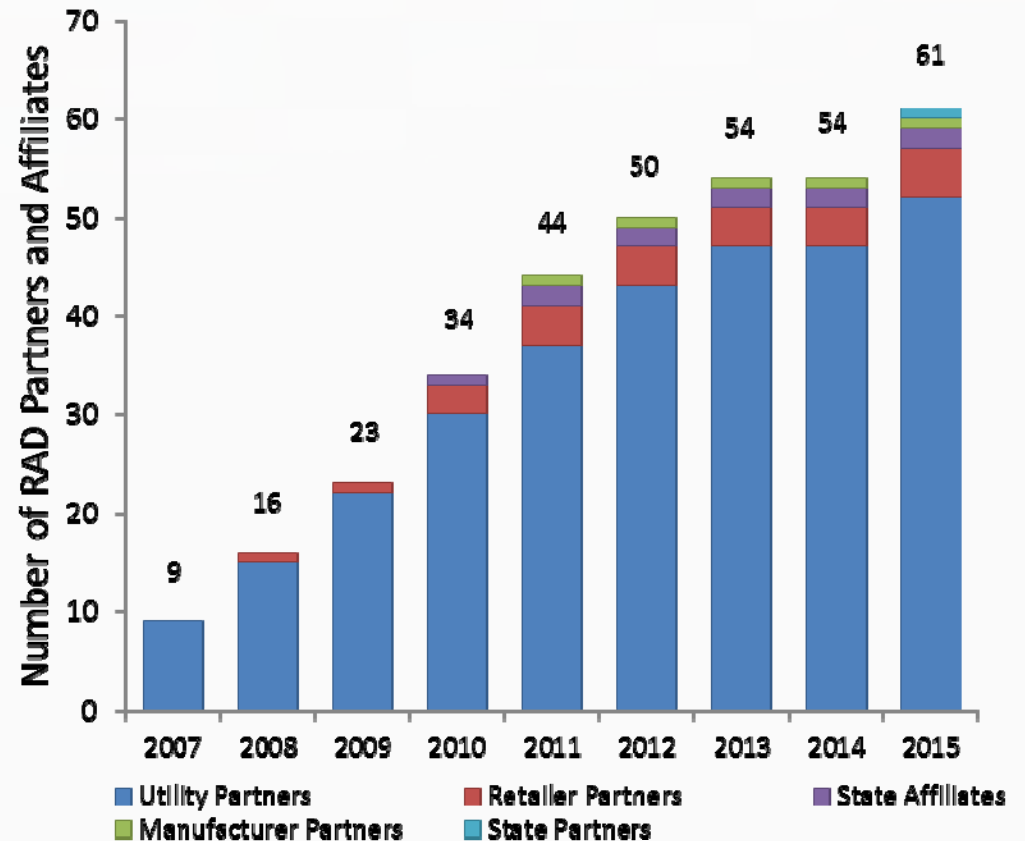
RAD Updates

Program Achievements



- **RAD recently welcomed 7 new partners:**

- Alameda Municipal Power
- Delaware Department of Health and Social Services
- Holland Board of Public Works
- New York State Electric and Gas Corporation
- PECO Energy Company
- Rochester Power
- Spicher Appliances



Recap of 2014 Partner Achievements



- Partners processed **938,084 units**
 - 5x increase since start of program
- Partners recovered **313,100 lbs. of refrigerant**
 - 1.2 million MTCO₂ eq. emissions avoided
 - GHG benefits equivalent to removing 258,500+ passenger vehicles from the road for a year
- Partners recovered **351,500 lbs. of foam**
 - 481,000+ MTCO₂ eq. emissions avoided
 - GHG benefits equivalent to removing 101,200+ passenger vehicles from the road for a year

HFCs and Efforts to Curb Emissions



- **President's Climate Action Plan (CAP)**
 - Announced in 2013
 - Pledged to reduce emissions of HFCs through both domestic and international leadership
- **Significant New Alternatives Policy (SNAP) Program**
 - Recent SNAP actions that impact refrigerated appliances include:
 - 2 notices (October 2014 and July 2015) and 1 rulemaking (April 2015) listing additional alternatives for use in refrigerated appliances
 - 1 final rule issued (July 2015) to list certain HFC blowing agents as unacceptable for use in refrigerated appliances
 - 1 proposed rule (March 2016) to list certain HFC refrigerants as unacceptable for use in refrigerated appliances





Recent SNAP Determinations that Impact New Household Refrigerators

Compound	SNAP Determination	Effective Date
Foam Blowing Agents		
HFC-134a, HFC- 245fa, HFC-365mfc and blends thereof	Unacceptable	1/1/2020
Formacel TI and Formacel Z-6	Unacceptable	1/1/2020
Methylal and HFO–1336mzz(Z)	Acceptable	10/21/2014
Refrigerants		
R-513A	Acceptable	7/16/2015
R-290 (propane)	Acceptable	4/10/2015
R-450A	Acceptable	10/21/2014

HFCs and Efforts to Curb Emissions



- International Diplomacy
 - Negotiations under the Montreal Protocol to phase down HFCs

DUBAI PATHWAY
ON HFCs

- Executive Actions & Private Sector Commitments
 - Expected to reduce consumption of HFCs by more than 1 billion MTCO₂ eq. through 2025
 - GHG benefits equivalent to removing 210 million passenger vehicles from the road for a year

RAD's Role in Addressing HFCs



- Proper disposal of **1 refrigerator** containing HFC-245fa foam avoids emissions of nearly **1 MTCO₂ eq.**
 - Foam recovery accounts for +50% of GHG savings
- In 2016, if foam were properly recovered from all 12.3 million refrigerators disposed in the U.S., **8.6 million MTCO₂ eq.** would be avoided*

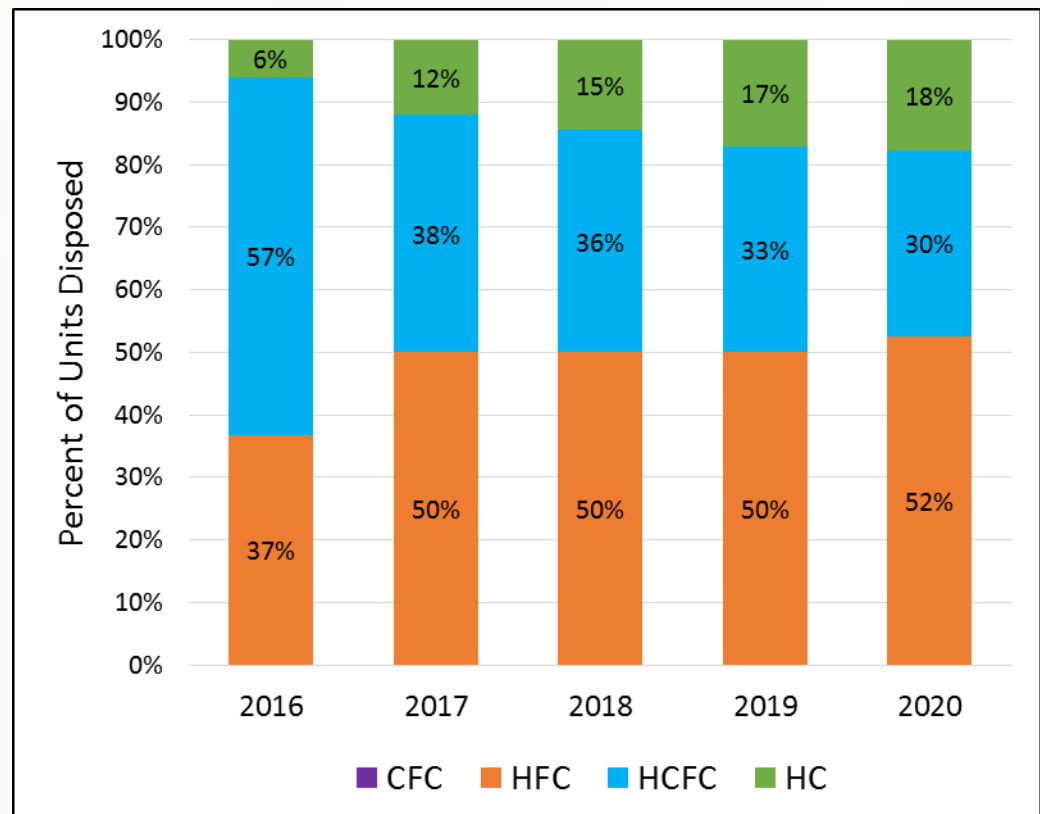
*U.S. EPA estimate, assuming 57% of units reaching end-of-life contain HCFC-141b, 33% of units contain HFC-245fa, 4% contain HFC-134a, and the remaining 6% contain hydrocarbons, and that blowing agent can be recovered from each unit at a recovery efficiency rate of 95%.

RAD's Role in Addressing HFCs



- In 2014, RAD partners recovered 65,500 lbs. of HFCs
- RAD partners can expect to see more appliances containing HFCs at disposal
- **Big opportunity** for RAD partners to demonstrate leadership

Foam Blowing Agents in Refrigerators at Disposal*

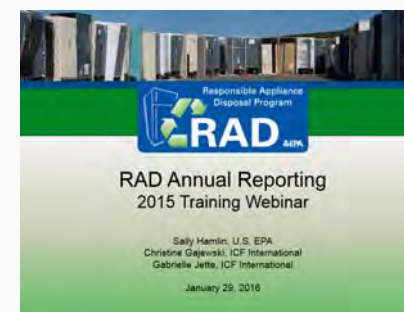


*Assuming units are on average 14 years old

Recent RAD Activities



- 2014 RAD annual report is available
 - Download a copy from RAD website:
<https://www.epa.gov/rad/responsible-appliance-disposal-program-2014-annual-report>
- RAD reporting form webinar was held 1/29
- Final draft of RAD benefits piece was sent to partners on 2/17
 - Topics covered include:
 - Concerns over appliance disposal today and how RAD partners help
 - Calculated benefits of proper appliance disposal (cost savings and emission reductions)
 - RAD partner accomplishments
 - Partner feedback on format and/or dissemination?



Upcoming RAD Activities



- Hosting a webinar on non-energy benefits of RAD
- Processing 2015 partner reporting forms and developing annual report
- Enhancing partner recognition
 - Longer-term ideas being considered include:
 - Tiered structure based on partner accomplishments regarding amount of CFC, HCFC, and HFC materials processed
 - Shorter-term ideas include:
 - Recognize partners through social media, press releases, and RAD website
- Updating RAD website
- Recruiting new partners



Group Discussion

Reminders for Group Discussion



- Share experiences with other RAD partners and recyclers in an active, facilitated dialogue
- Be willing to learn from each other; keep an open mind
- Please identify yourself when speaking

Aligning RAD Activities with Partner Needs



- Are there specific suggestions for how RAD can make the benefits piece more useful to your program?
- What other resources can RAD provide to better support and promote your program?
 - Suggestions for webinar topics and/or RAD analyses?
- Does your program use social media? If so, how can RAD better recognize your program through social media (e.g., LinkedIn, Twitter, and Facebook)?
 - How else can RAD recognize your program?
 - How can RAD better help you engage consumers and/or other target audiences?

Partner Successes and Program Challenges



- What are some partner success stories?
- How have partners benefited from the RAD program over the past year?
- What are some partner challenges, and how can RAD help?

Thank you for participating!



For Additional Information Contact:

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Reminder: Please fill out the feedback form!