GreenChill Achievement Awards

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GREENCHILL PROGRAM UPDATE
A Changing Industry

CFCs
- Phased out

HCFCs
- Being phased out; lowering in use
  - Mainly R-22
  - High GWP (1820)
  - ODPs

High-GWP HFCs
- Lowering in use
  - R-404A common
  - Very High GWPs (3920 - 3990)
  - No ODPs

Lower-GWP HFCs
- Increasing in use
  - R-407A common
  - High GWPs (1770 - 2110)
  - No ODPs

Low and Zero GWP Refrigerants
- Pilot projects and emerging technologies
  - CO₂, Ammonia, HFOs, Hydrocarbons
  - Low GWPs
  - No ODPs
GreenChill Partnership
Installed Refrigerants
(Commercial Systems)

2007
- R-404A: 19.5%
- R-22 (ODS): 63.8%
- Other: 7.2%
- R-407A: 9.4%
- R-507A: 0.1%
- R-422D: 0.0%

2014
- R-404A: 44.8%
- R-22 (ODS): 30.5%
- Other: 7.9%
- R-407A: 10.5%
- R-507A: 1.1%
- R-422D: 5.3%
Average Ozone Layer Impact per Store
(Commercial Systems)

Ozone Depletion Potential (ODP)
Pounds Installed per Store

- 2007: 110.6
- 2008: 101.8
- 2009: 94.9
- 2010: 87.1
- 2011: 63.7
- 2012: 57.1
- 2013: 47.1
- 2014: 42.3

Installed Refrigerant
GreenChill Effect

• Of the 23 GreenChill partners who have been in the partnership for more than one year
  – 19 have reduced their emissions rate since joining the partnership
  – 13 have reduced their emissions rate by more than 10%
  – 2 have reduced their emissions rate by more than 40%
  – 4 have lowered their emissions rates in 3 or more consecutive years

• Currently 9 stores awarded GreenChill Platinum-level certifications
GreenChill Partnership

GreenChill partners now account for 29% of all stores
Industry Potential

If every U.S. supermarket met GreenChill Partners’ average emission rate, the supermarket industry would:

• Reduce annual refrigerant emissions by 29 MMTCO₂ eq & 196 ODP tons
• Save $169 million in annual refrigerant replacement costs
Store Re-Certifications

The graph shows the number of new certifications and re-certifications over the years April 2012 to April 2015. The blue line represents new certifications, while the orange line represents re-certifications. The data indicates a general trend of increase in both categories over the years, with fluctuations.
Newest GreenChill Partners
ACHIEVEMENT AWARD WINNERS
Superior Goal Achievement

• Partners are eligible for a GreenChill award when they set a corporate-wide goal for refrigerant emissions (for commercial systems) below the rate achieved the year before.

• Many GreenChill Partners are demonstrating continuously reduced emissions.

• Four partners achieved their 2014 emissions rate goals and receive the “Superior Goal Achievement” award.
Superior Goal Achievement
Exceptional Goal Achievement

• Each year Partners have the option to set a “stretch” goal to even further reduce refrigerant emissions

• Two partners achieved their “stretch” goal and receive the “Exception Goal Achievement” award
Exceptional Goal Achievement
Most Improved Emissions Rate

• Two “Most Improved Emission Rate” awards:
  1. Compared to last year’s emissions rate
  2. Compared to company’s baseline emission rate when they joined the GreenChill Partnership

• Achieved notable reductions in refrigerant emissions
Most Improved Emissions Rate

Over Baseline Year

Year-to-Year
Best Emissions Rate

• Two “Best Emission Rate” awards, for the lowest refrigerant emissions from all sources among:
  – Small/Independent partners
  – Retail Chain partners

• Achieved incredibly low corporate emission rates
Best Emissions Rate

Retail Chain

Small/Independent
Best of the Best
Best Certified Store

• Best GreenChill Certified Store

• Notable for demonstrating an innovative aspect of an advanced refrigeration technology
Best of the Best

Dunwoody, GA
Two “Store Certification Excellence” awards:

- **Supermarket company** with the most GreenChill store certifications in the past year
  - 42 store certifications (vs. 27 last year)

- **Systems manufacturer** with the most GreenChill store certifications in the past year
  - 101 store certifications (vs. 67 last year)
Store Certification Excellence
Store Re-Certification Excellence
Consecutive Re-Certifications

• The “Store Re-Certification Excellence” award goes to store that achieved GreenChill certification 5 consecutive years

• Six stores are winners
Distinguished Partner

• Extraordinary leadership and initiative to further the GreenChill mission in the past year

• One supermarket partner
Distinguished Partner

Nick Cordasci
Universal GreenChill Appreciation

• Great partners and participants!!!
• All are playing a role through data reporting, store certifications, and refrigerant management plans
• Providing wonderful industry insights and showing dedications

Thank you!
Thank You

• Maureen Beatty, National Refrigerants
• Marc Chasserot, Accelerate America
• Ted Gartland, E.Gartland & Associates
• Laurie Gethin, FMI
• Bill Sellers, United Refrigeration

For more information on today’s GreenChill awards and winners visit [www2.epa.gov/greenchill](http://www2.epa.gov/greenchill)