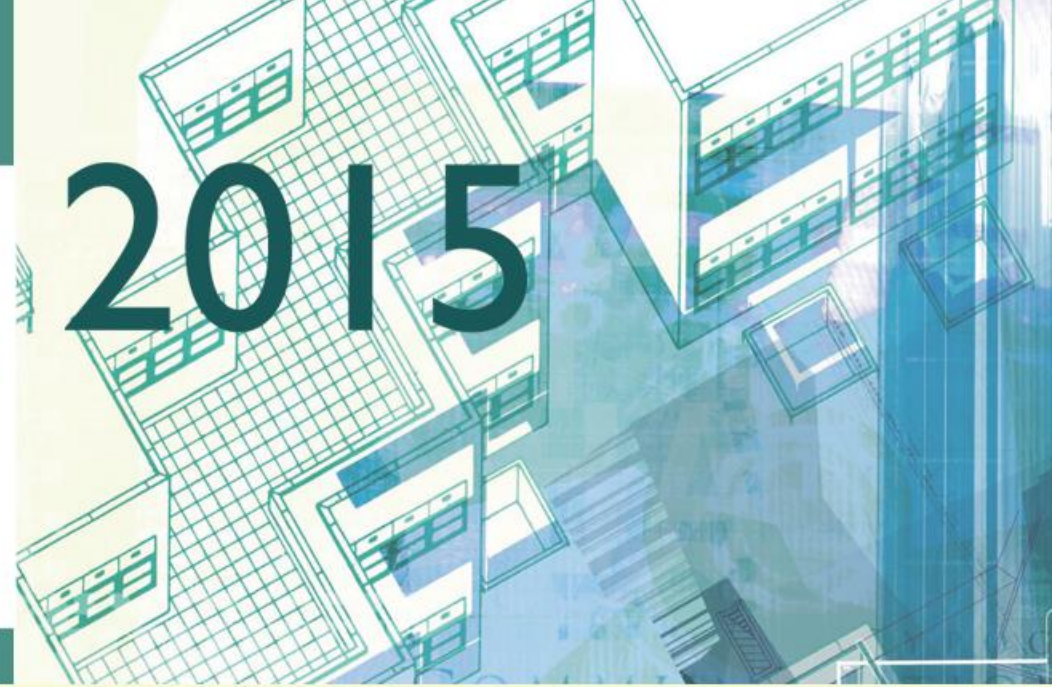


Energy & Store
Development Conference

E+SD

2015



GreenChill Achievement Awards



Tom Land, U.S. EPA

GREENCHILL PROGRAM UPDATE

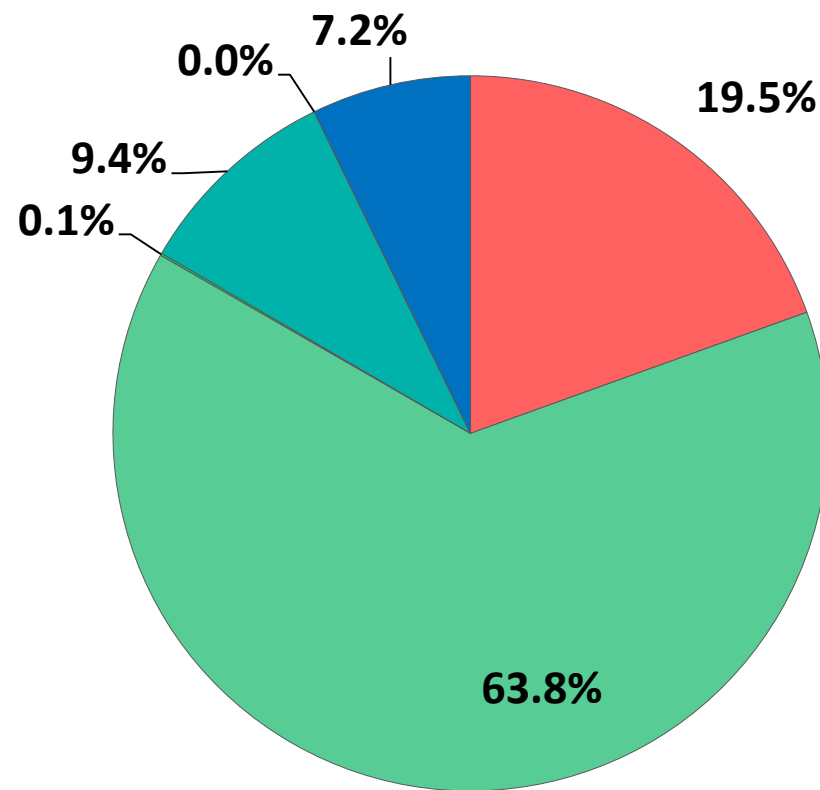
A Changing Industry

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 CO ₂ , Ammonia, HFOs, Hydrocarbons Low GWPs No ODPs

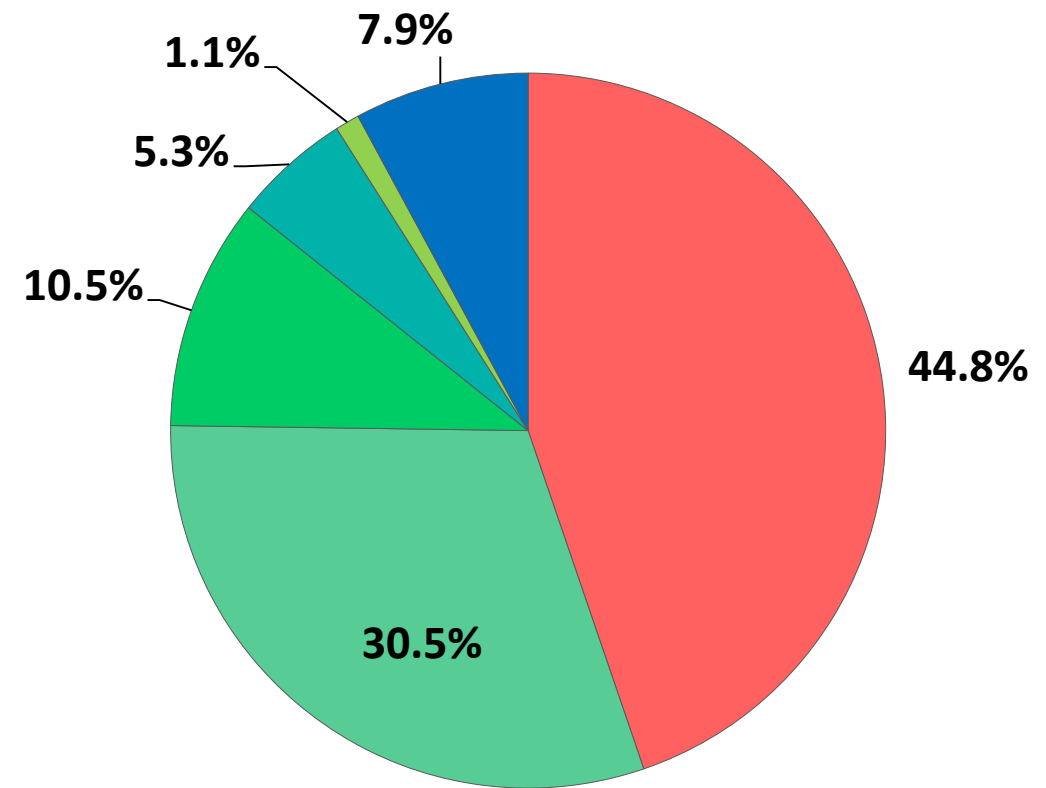
GreenChill Partnership Installed Refrigerants

(Commercial Systems)

2007



2014



■ R-404A

■ R-22 (ODS)

■ R-407A

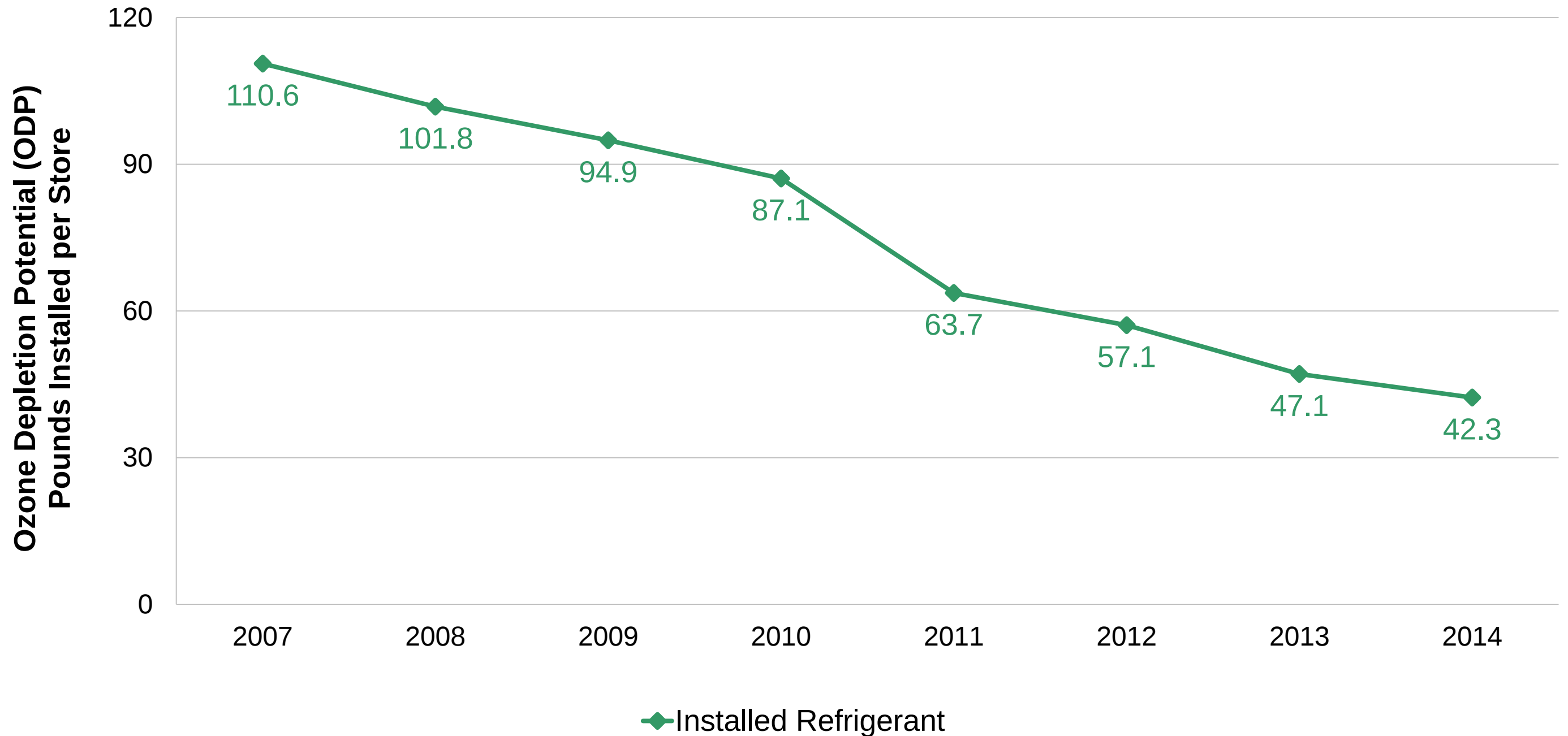
■ R-507A

■ R-422D

■ Other

Average Ozone Layer Impact per Store

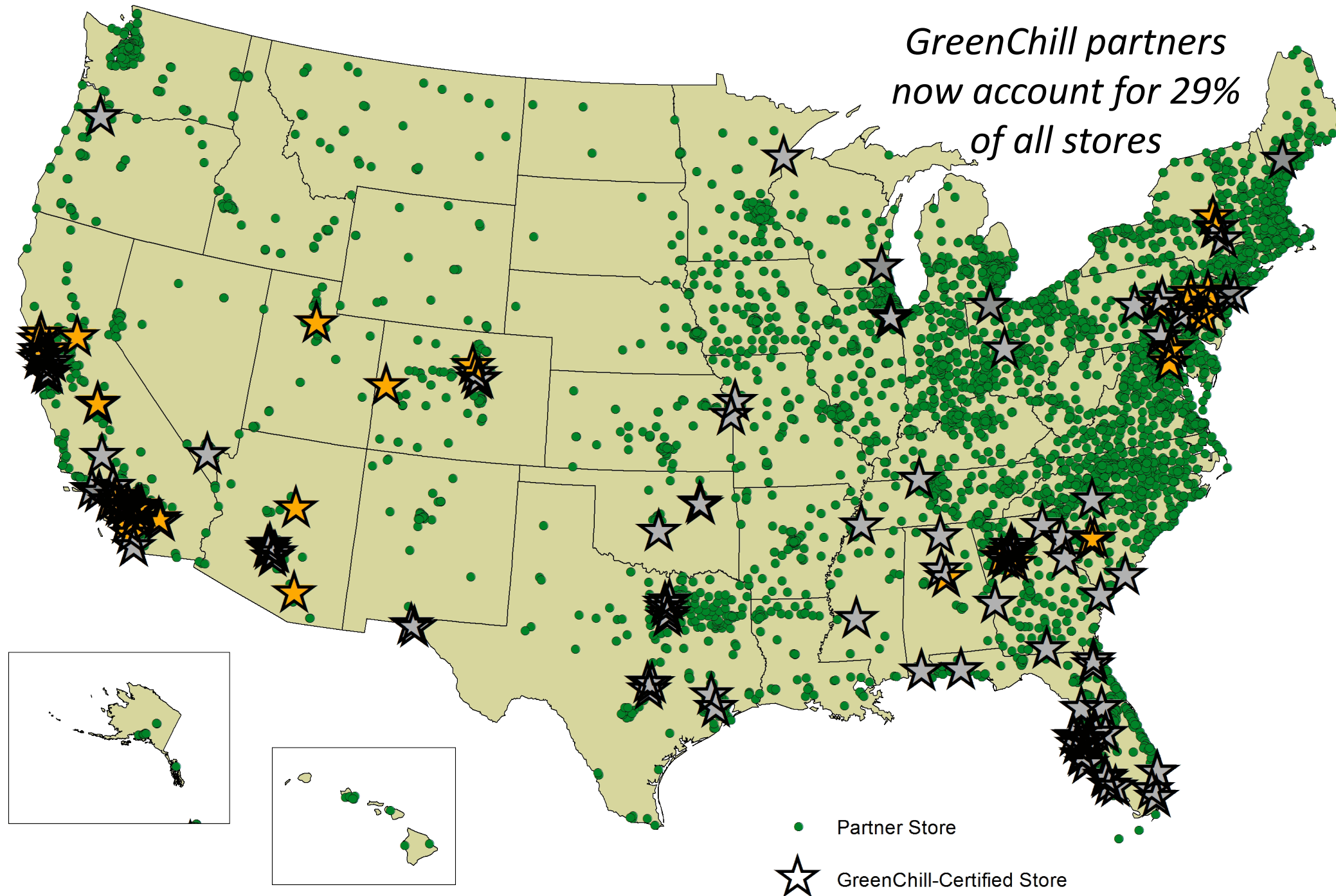
(Commercial Systems)



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

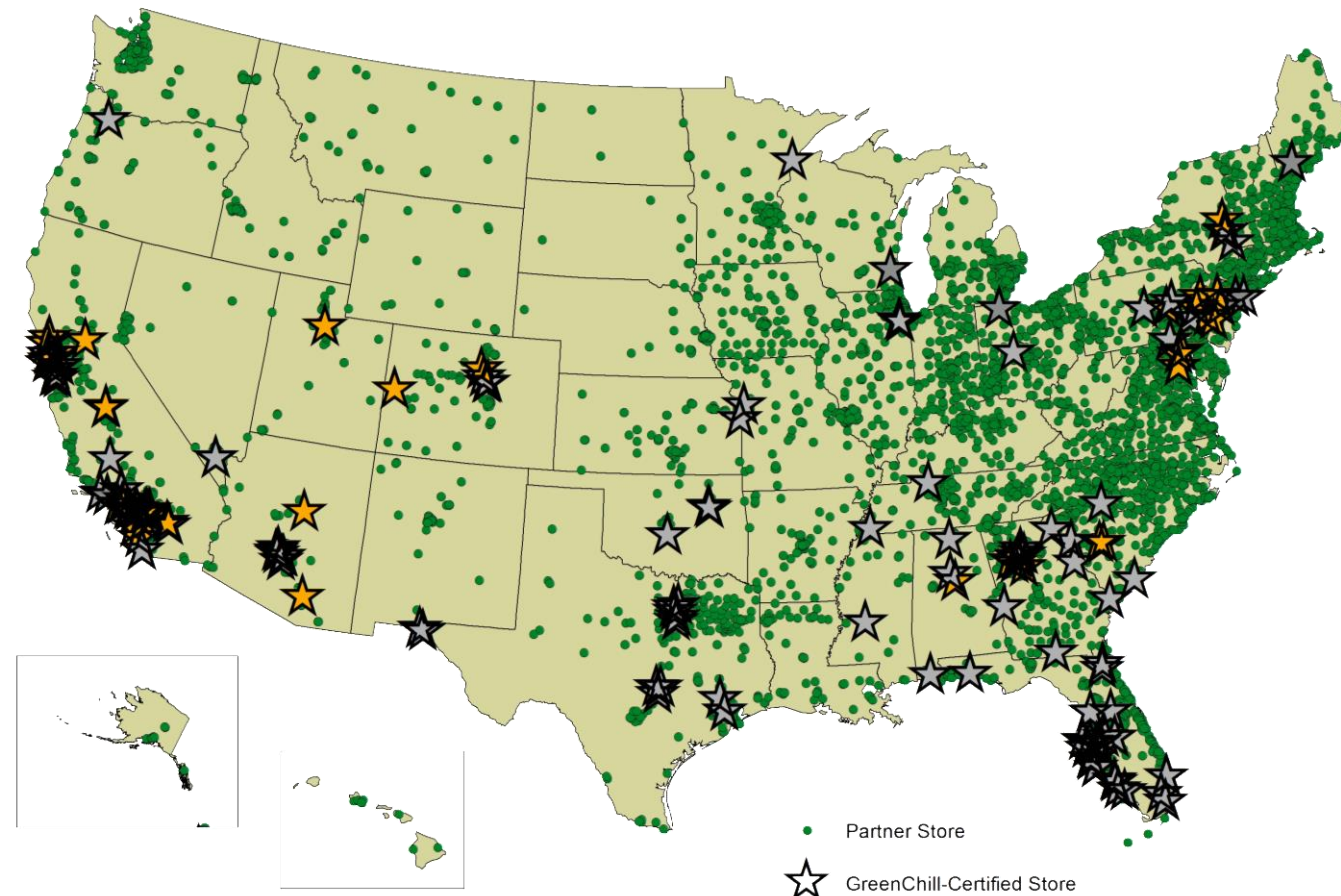


Industry Potential

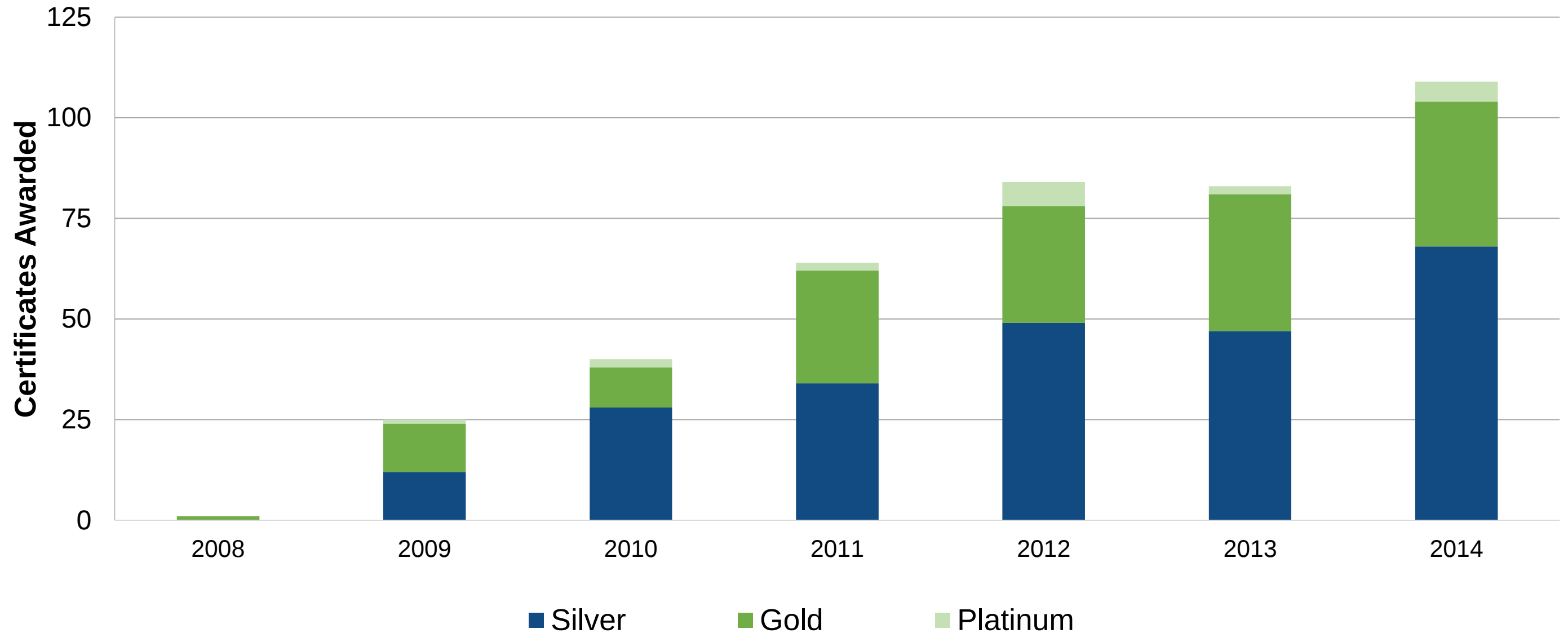
If every U.S. supermarket met GreenChill Partners' average emission rate, the supermarket industry would:

- Reduce annual refrigerant emissions by 29 MMTCO₂eq & 196 ODP tons
- Save \$ 169 million in annual refrigerant replacement costs

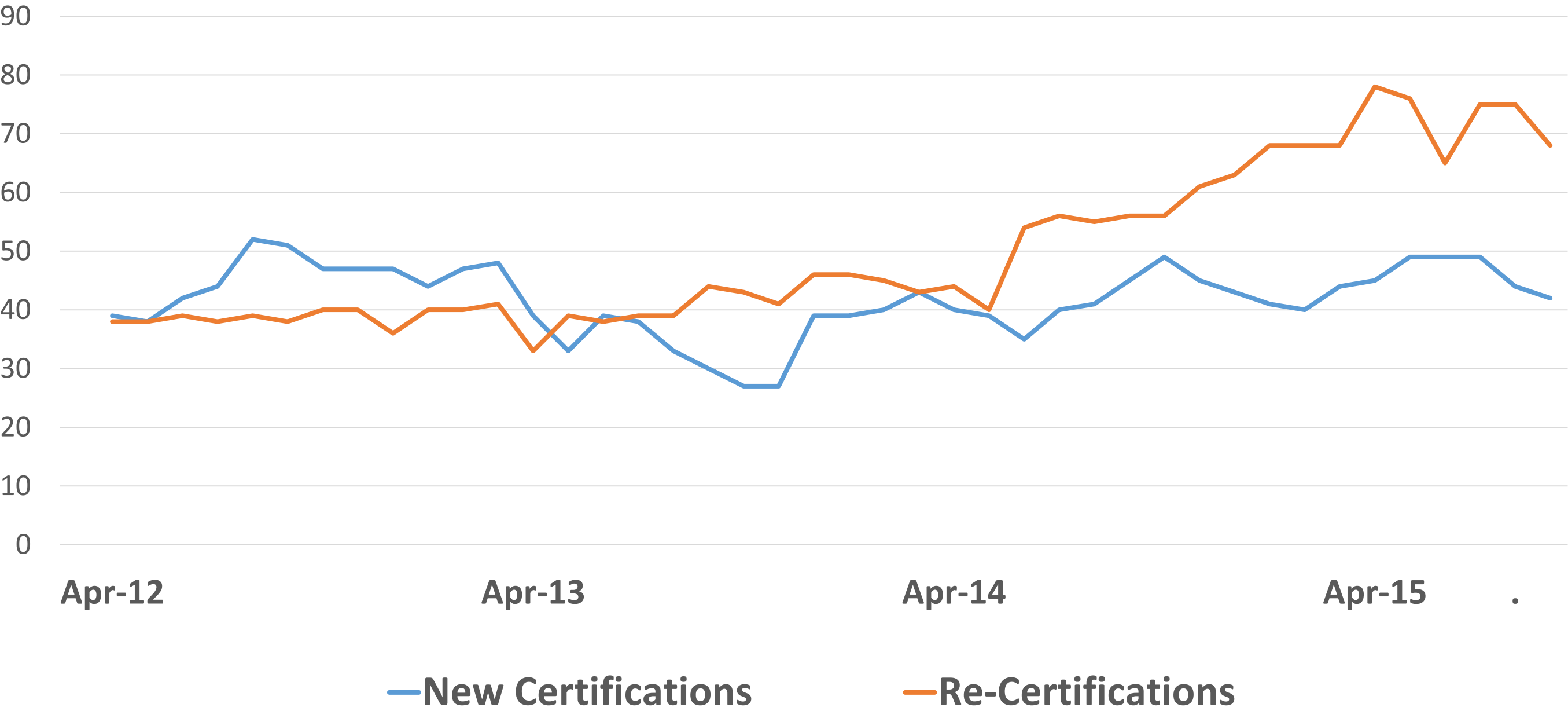
- ★ Platinum-Level Certification
- ★ Gold-Level Certification
- ★ Silver-Level Certification
- GreenChill Partner Store



Store Certification Program Growth



Store Re-Certifications



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

Store Certification Excellence

Most GreenChill-Certified Stores

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



Hillphoenix®

A **DOVER**™ COMPANY

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

Store Re-Certification Excellence



Thousand Oaks, CA

Wegmans

Lanham, MD



Carlsbad, CA
Cathedral City, CA
Moreno Valley, CA

WHOLE
FOODS[®]
M A R K E T

Santa Rosa, CA

Distinguished Partner

- Extraordinary leadership and initiative to further the GreenChill mission in the past year
- One supermarket partner

Distinguished Partner



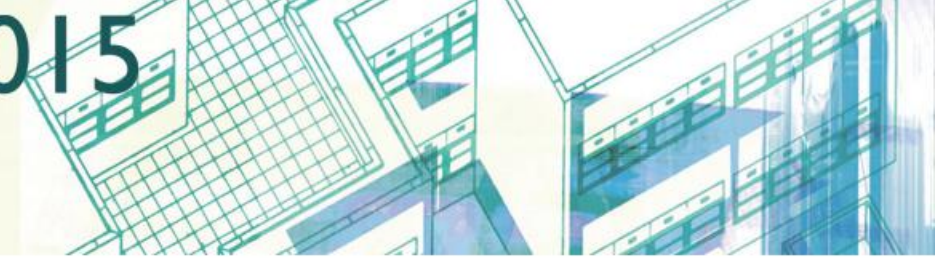
Nick Cordasci

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