Energy & Store
Development Conference

E+SC

September 7-10, 2014 St. Louis Union Station Hotel St. Louis, MO









GreenChill Achievement Awards



Tom Land, U.S. EPA



GreenChill Update

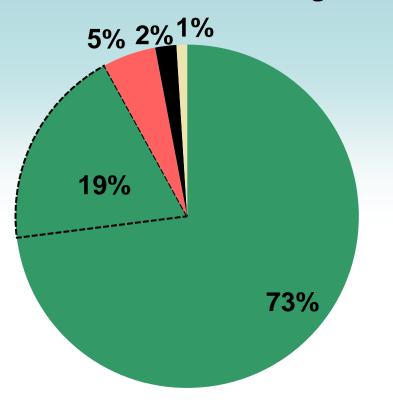


A Changing Industry

CFCs	Phased out	
HCFCs	Being phased out; lowering in use Mainly R-22 High GWP (1820) ODPs	
High-GWP HFCs	Lowering in use Significantly higher GWPs (3920 - 3990) No ODPs	
BONMENTAL PROTECTION		Tron
Lower-GWP HFCs	Increasing in use High GWPs (1770 - 2110) No ODPs	No.
- GREENCHILL		
Low and Zero GWP Refrigerants	Pilot projects and emerging technologies CO ₂ , Ammonia, HFOs, Hydrocarbons Low GWPs No ODPs	5 H.IF

Market Analysis: Supermarket Industry Structure

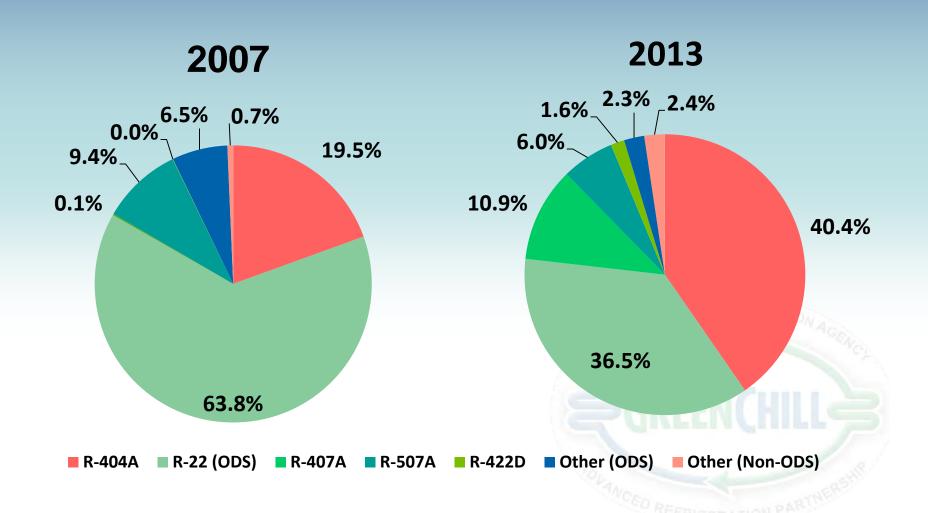
Annual Profile – Based on Number of Stores in Categories



- Operating Stores
- **■** GreenChill Stores
- Retrofitted Stores
- New Stores
- **Closed Stores**

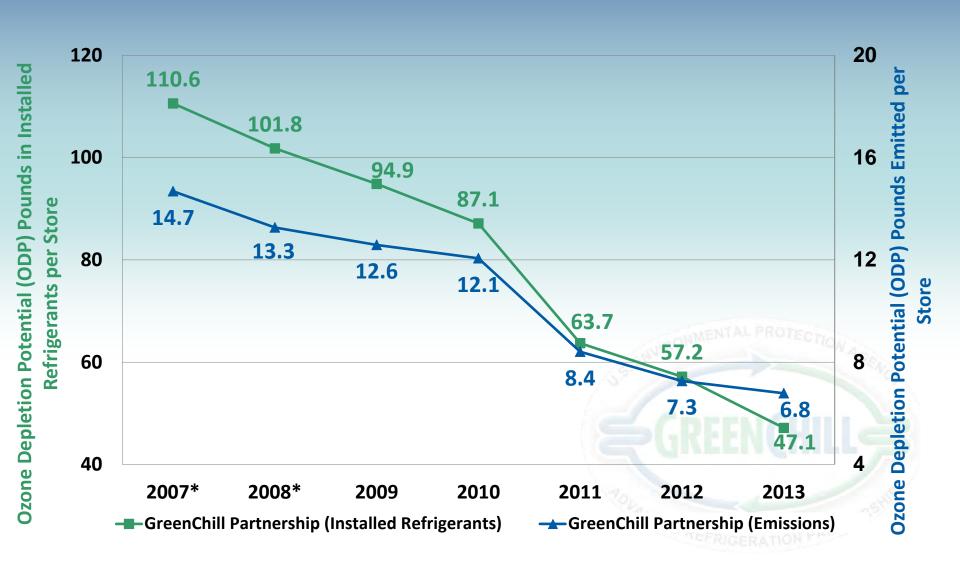
Partnership Installed Refrigerants

(Commercial Systems)



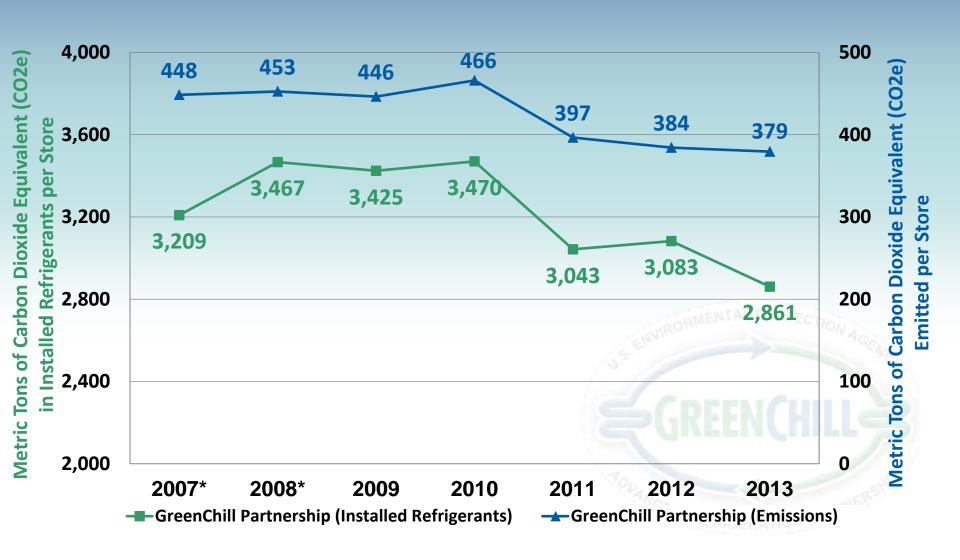
Average Ozone Layer Impact per Store

(Commercial Systems)

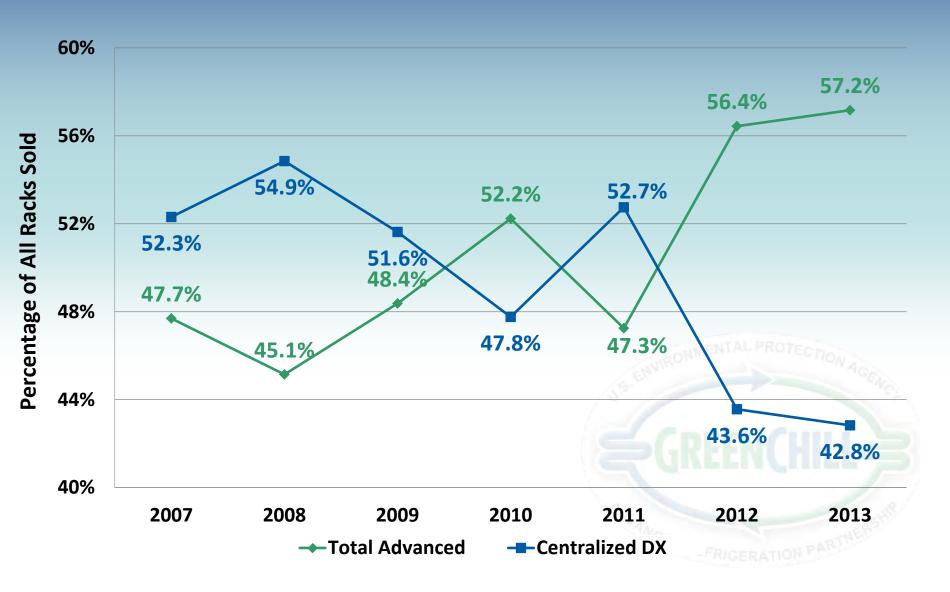


Average Climate Impact per Store

(Commercial Systems)



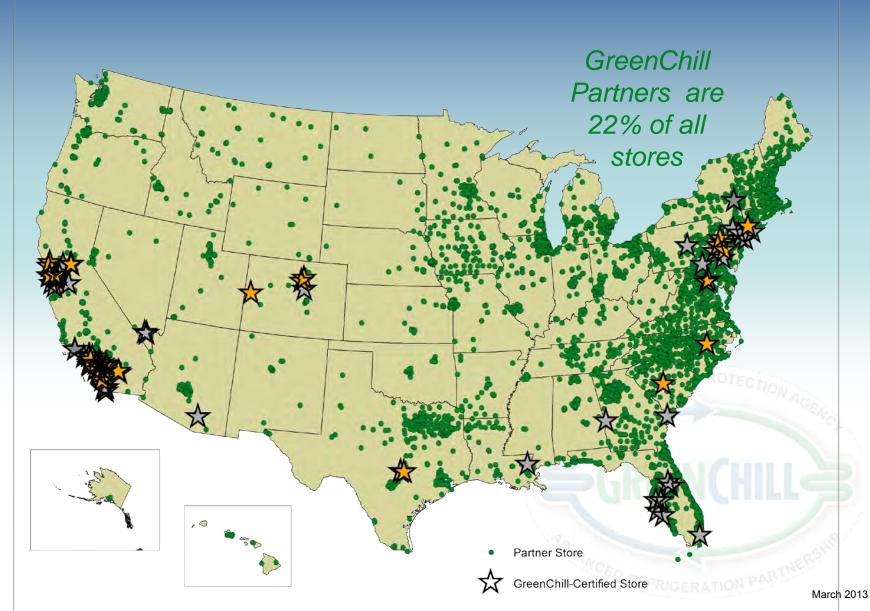
Advanced and Centralized DX Racks Sold



GreenChill Effect

- Now, in the USA, five CO₂ transcritical refrigeration systems in food retail (more coming)
 - ► Four applied for and were awarded GreenChill platinum store certifications
 - ► And ... more than 35 stores in Canada awarded GreenChill platinum certifications
- ➤ Of 23 GreenChill Partners reporting in 2013
 - ➤ 13 companies have leak rates below the GreenChill 2013 weighted average of 13.5%
 - ▶ 7 partners achieved their emission goals in 2012 and in 2013
 - ➤ 5 partners have lowered their emissions in each of the past 3 years!!!

GreenChill Partnership



Industry Potential

► If every U.S. supermarket met GreenChill benchmarks, the supermarket industry would:

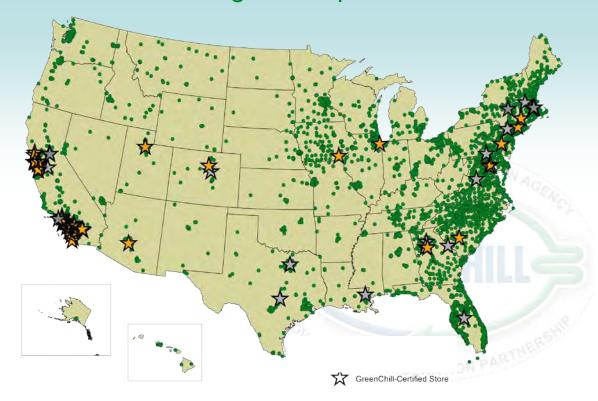
► Reduce emissions by 22 MMTCO2eq & 238 ODP tons

Save \$100,000,000 in reduced refrigerant replacement costs...

annually



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



Encouraging Store Re-certifications

New GreenChill store certification plaque

- Lower cost
- Each re-certification is noted on the plaque
- Get recognition for maintaining a low leak rate
- ► An "addendum plaque" is available now for past certifications, and will be available for a store's 10th recertification ... and for years beyond





Award Winners





Superior Goal Achievement



Superior Goal Achievement

- Partners achieve their 2013 goal for reducing refrigerant emissions
- > 7 Partners
- Challenging goals



Superior Goal Achievement

















Exceptional Goal Achievement



Exceptional Goal Achievement

- ➤ Partners that achieve their 2013 "stretch" goal to further reduce refrigerant emissions
- ▶ 1 Partner achieved their "stretch" goal to further lower their emission rate



Exceptional Goal Achievement







Most Improved Emissions Rate



Most Improved Emissions Rate

- Most improved emission rate over the past year
 - ► When compared to last year's, and
 - ► When compared to the company's baseline emission rate when joined GreenChill Partnership
- Achieved an incredibly low corporate emission rate

Most Improved Emissions Rate

BUENLEN'S Fresh Foods





Best Emissions Rate



Best Emissions Rate

The lowest corporate-wide refrigerant emissions rate of all the Partners (all sources)

Achieved an incredibly low corporate emission rate

Best Emissions Rate





Best of the Best

Best Certified Store



Best of the Best

► Best GreenChill Certified Store

► CO₂ transcritical refrigeration system



Best of the Best



Brooklyn, NY



Store Certification Excellence

Most GreenChill-Certified Stores



Store Certification Excellence

- ► The <u>supermarket companies</u> with the most GreenChill store certifications in the past year
 - 27 store certifications
 - 26 store certifications
 - Last year's winner achieved just 15 certifications
- The <u>systems manufacturer</u> with the most GreenChill store certifications in the past year
 - ▶ 67 store certifications
 - 41 last year

Store Certification Excellence

Publix



Hillphoenix.





Store Re-Certification Excellence

Consecutive Re-Certifications



Store Re-Certification Excellence

- Second time for this award
- GreenChill store certification 5 consecutive years
- ► Five store winners



Store Re-Certification Excellence



Publix

Suwanee, GA Winter Haven, FL





Hanover, PA



Distinguished Partner



Distinguished Partner

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

► One award for a <u>supermarket partner</u>



Distinguished Partner







Thank You

- Laurie Gethin, FMI
- ► Ted Gartland, E.Gartland & Associates
- Emily Nebuloni, Hussmann
- and the Food Marketing Institute (FMI)



For more information on today's GreenChill awards and winners visit www2.epa.gov/greenchill