GreenChill Partnership

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Agenda

- GreenChill Overview
  - 3 programs to eliminate refrigerant emissions from supermarkets
  - Future plans
- Partners: what they achieved & what they received
  - Supervalu – George Ronn
  - Fresh & Easy – Steve Hagen
  - Sprouts Farmers Market – Jerry Stutler
GREENCHILL’S MISSION: REDUCE REFRIGERANT EMISSIONS

Corporate Emissions Reductions Program
GreenChill Partners measure emissions and set annual goals.

Store Certification Program
Awards GreenChill certification to stores for achieving emissions reduction targets.

Advanced Refrigeration Program
Promotes the use of advanced refrigeration technologies, strategies, and practices.
GreenChill’s Stakeholders

- Environmental Regulators
- Environmental NGOs
- Advanced Refrigeration Technology Manufacturers
- Component Manufacturers
- Food Retailers
- Chemical Manufacturers
- Service Contractors and Technicians
- Data Systems Providers
- Service Technician Certification Organizations
- Trade Organizations

Current Partner Categories
Potential Future Partner Categories
The Future: Low GWP Refrigerants

- **GreenChill Mission:** To reduce refrigerant emissions from supermarkets and decrease their impact on the ozone layer and climate change.
- **Motto:** reduce refrigerant charge, reduce leaks, use lowest GWP refrigerant possible for your needs.
- **Makes sense for the environment and your bottom line.**
Best Practice Guidelines & Webinars

- Advanced Refrigeration Technology Guidelines
- Leak Prevention & Repair Best Practices Guideline
- Monthly Webinar Series
Continue Store Certification Program

- Standards are good; process runs well
- Re-certifying stores in year 2
- Continuing to collect data
- Moving to webforms; database access
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Steve Hagen
Refrigerant management includes sophisticated data management system:
- Track refrigerant usage – techs don’t get paid for refrigerant until leak & repair are in system
- Auto-generated reports on usage, top stores, lowest stores, etc.
- Data is evaluated monthly and patterns are evaluated, discussed, & corrective action taken

Annual refrigeration meetings with technicians, designers, engineers:
- Discuss leaks / design changes to reduce leaks
Fresh & Easy Neighborhood Market

- Implemented GreenChill best practices
- Redesigned prototype to eliminate 43 potential leak fittings
- Maintaining a 10% leak rate - goal is 7%
- Install leak detection equipment in every store
  - Plan to import a more reliable leak detector from Europe
Fresh & Easy Neighborhood Market

- Installed our first CO2 store – GreenChill Silver Certification Award
- Received 2nd Silver Award for conventional 404A store
- Changed prototype to use hybrid microchannel condenser to reduce charge
  - Expect all stores built after mid 2011 to achieve GreenChill Silver or better
- Changed prototype refrigerant from R404A to R407A
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Jerry Stutler
Sprouts Farmers Market

- GreenChill’s Installation Leak Tightness Guidelines
  - Reduced emissions during & after installation
- GreenChill Store Certification Program
  - Re-examined initial store design
  - Re-examined system engineering
  - Ensuring the lowest refrigerant charge design while keeping equipment cost & energy efficiency at the forefront
Sprouts Farmers Market

- Included GreenChill's installation & certification requirements in specifications
- Raised the bar for all refrigeration installation companies
- Level of quality & pride in workmanship increased tremendously
- Installing refrigeration contractor now assesses the most efficient & shortest runs for piping in an effort to reduce refrigerant charge
- Level of competitiveness between installing refrigeration companies to do their best & to help achieve GreenChill Certification
Sprouts Farmers Market

- GreenChill partner commitment = setting annual emissions reduction goal
  - Always wanted to keep leaks & loss to a minimum – but a goal gives a true incentive
  - Pride among other retailers in ensuring we are doing our part to protect the environment
  - Competition – want to be better than counterparts

- Being a GreenChill Partner & achieving GreenChill Store Certifications brings recognition/publicity
  - EPA publicity for carbon footprint reduction efforts
GreenChill’s Quarterly Partner Meetings & Monthly Webinars

- Valuable information on refrigeration systems and innovations
- Used to be almost unheard of for competing supermarkets to share ideas & experiences
- GreenChill opened lines of communication between competitors both in retail and manufacturing
Supervalu

- Performance validation
- GreenChill Store Certification
- Breaking the 10% emissions rate range
- GreenChill team support and best practice sharing
- Inside connection at EPA
For More Information

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