

# Green Gas Station

Blue Skyways  
Collaborative Meeting  
October 30, 2008

# Green Gas Station?



# Not exactly...



# Nope



## Right color dispenser – wrong idea



# Purpose of this Presentation

- Share Green Gas Station concept
- Highlight Region 7's pilot demonstration
- Gather your ideas and support to develop a Green Gas Station framework for future stations
- Build coalitions to help:
  - Explore systems approach to gas stations
  - Raise awareness and increase the use of alternative fuels and biofuels nationwide
  - Promote energy efficiency and alternative energy development

# Project Goals

- Develop a Green Gas Station concept to encourage facilities to consider using alternative fuels, energy sources and minimize waste
- Educate and encourage the public on energy options and environmental stewardship
- Utilize pilot demonstrations to increase awareness of Green Gas Stations
- Develop a framework for Green Gas Stations

# Before and After



Held a pilot demonstration on June 30, 2008, to showcase various aspects of a Green Gas Station

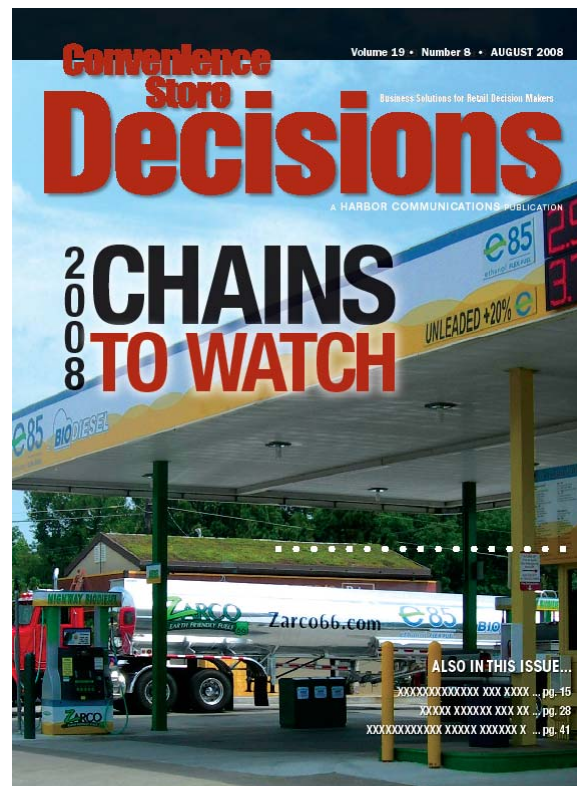
# Grand Opening



# Grand Opening



# National Publicity



## Innovative “Green” Features Showcased During Pilot Demonstration

- Green roof
- Alternative energy sources
  - Wind turbines
- Stormwater collection system
- Environmental landscaping
- Rain Garden
- Energy-efficient lighting and reduced lighting area
- Recycling bin and collection process
- Use of alternative/renewable fuels
- Environmental education digital interactive center being evaluated

# Green Feature: Alternative Fuels



# Characteristics of Green Gas Stations



# Green Features

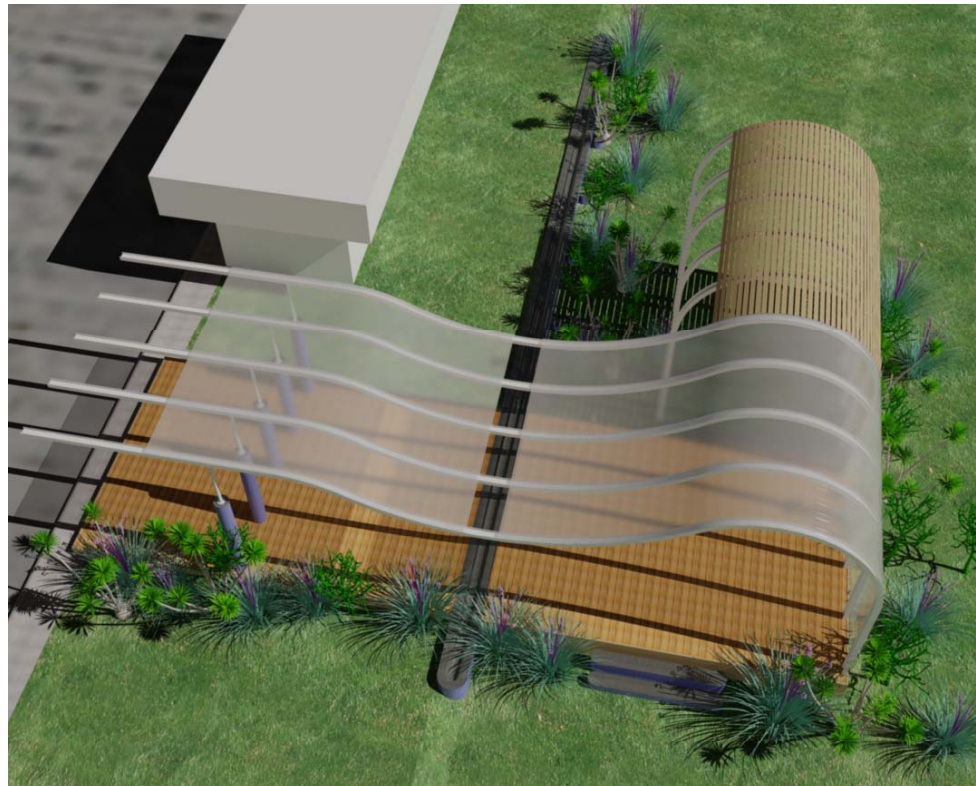
- Green Roof



- Information Booth



# Green Feature: Rain Garden



# List of Partners/Participants

- Farmers' associations
- State Department of Agriculture
- National Renewable Energy Laboratory
- Industry representatives
- Local governments
- Petroleum Marketers Associations
- State insurance programs
- State/federal regulatory agencies
- Storage tank owners/operators
- University of Kansas

# EPA pumped up about new Zarco station



Richard Gwin

State and federal officials were in town Monday to celebrate the Zarco 86 Earth Friendly Fuels, 2005 W. Ninth St. From left are state Rep. Tom Sloan, R-Lawrence, Adrian Polansky, Kansas secretary of agriculture, and U.S. Rep. Dennis Moore, D-Kan.

# Station colored 'green' Innovative Lawrence business sells only biodiesel, ethanol gas

By Tim Carpenter  
*The Capital-Journal*

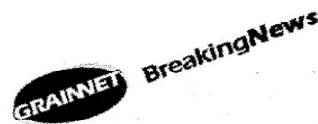
Published Tuesday, July 01, 2008

# GREAT MEDIA COVERAGE!



# First Earth friendly fuel station opens

By Doug Rich



Date Posted: Jul. 01 2008

# EPA Spotlights Green Technologies at Grand Opening of Zarco Earth Friendly Fuels Station in Lawrence, KS

# Presented at the NACS Conference

## ● **TEN THINGS TO HELP GO GREEN**

- 1. Implement Recycling Programs
- 2. Analyze Lighting System – Interior & Exterior
- 3. Check Equipment for Energy Star Rating
- 4. Water Reclamation Systems
- 5. Waterless Urinals and Dual Flush Commodes
- 6. Energy Conservation and Monitoring Systems
- 7. Daylighting
- 8. Landscaping to Minimize Heat Island Effects
- 9. Radiant Barrier on Roof and Exterior Walls
- 10. Alternative Energy Sources – wind, solar
- **BONUS:** Evaluate all building materials for sustainability

## Example: Water Reclamation System

- **PURCLEAN RECLAMATION SYSTEM:**
- **Incremental Cost: \$22,000.00**
- **Annual Savings: \$12,424.00**
- **(Based on 80% Reclaim)**
- **Impact Fee Savings: \$15,000 – \$25,000**
- **Water Saved: 1,800,000 gallons**

*Presented at the NACS Conference*

## Example: LSI's LED Lighting (exterior)

- Incremental Cost: \$9,000
- Annual Savings \$7,506 (1.2 Year ROI)
- Environmental Impact: 68.5% energy reduction

*Presented at the NACS Conference*

## Example: Cooler Doors

- Anthony International ESP System
  - Model 101 NT 181 Doors: 34,913 KWH/Yr
  - Model ELM2 NT 18 Doors: 18,438 KWH/Yr
  - Annual KWH Savings: 16,475 KWH/Yr
  - Incremental Cost \$3300 with payback in less than 1.3 Years

*Presented at the NACS Conference*

# May Attract New Customers



## Current EPA Funding

- Utilizing contract to assist the EPA in measuring the environmental benefits at the pilot site
- \$85k in OSWER innovations funding to develop three additional sites (Region 6, Region 7, and Region 9)

## Next Steps

- Seek input on the framework for Green Gas Stations
- Work with partners/stakeholders to develop marketing tools
- Understand how the Blue Skyways Collaborative would like to be involved in this effort
- Learn about other Green Gas Station activities going on in all states