



Governor's
Energy Office



Advancing E85 and Biodiesel in Colorado

Colorado Governor's Energy Office
"Governor's Biofuels Coalition-Program Report"
Stacey Simms, Biofuels and Local Fuels Program
April 8th, 2008

"The Mission of the Governor's Energy Office is to lead Colorado to a New Energy Economy through energy efficiency, renewable and clean energy resources"

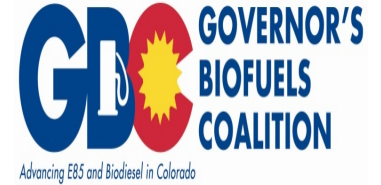
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Agenda



- Historical Frameworks
- Purpose of Work
- Barriers
- Approach
- Performance Measures
- Accomplishments
- Technology Transfer
- Future Activities
- Lessons Learned

What Was Happening



Incentives- State

- ❑ Alternative Fuel Infrastructure Tax Credit
- ❑ Alternative Fuel Vehicle Tax Credit

Incentives-Federal

- ❑ EPAct Infrastructure Tax Credit

Political Goodwill

- ❑ Governor Ritter Campaign- New Energy Economy
- ❑ Regional Political Emphasis

Resources in Colorado

- ❑ National Renewable Energy Lab
- ❑ Clean Cities Coalitions
- ❑ DOE Regional Office

Colorado Incentives

Colorado Incentives and Laws

Alternative Fuel Infrastructure Tax Credit

- For tax years beginning prior to January 1, 2011, the Colorado Department of Revenue offers an income tax credit for the cost of construction, reconstruction, or acquisition of an alternative fuel fueling facility that is directly attributable to the storage, compression, charging, or dispensing of alternative fuels to motor vehicles. The credit value is as follows:

Tax Year	
2009-2011	20%
2006-2009	35%

- For an alternative fuel refueling facility that will be generally accessible for use by the public, in addition to the person claiming the credit, the percentages specified above will be multiplied by 1.25. For an alternative fuel refueling facility that dispenses an alternative fuel derived from a renewable energy source, the credit percentages specified above will be multiplied by 1.25 and requires certification that at least 70% of the alternative fuel dispensed annually is derived from a renewable energy source for a period of 10 years. The credit has a maximum value of \$400,000 in any consecutive five-year period for each refueling facility. For more information about this credit, see the Colorado

Creation of GBC

- Formed in Fall of 2005 by the Governor's Energy Office to increase the usage and infrastructure of biofuels in Colorado
- 16 Steering Member of the *Colorado Biofuels Coalition*

NREL (chairman) Governors Energy Office, GM, Regional Air Quality Council, EPA, DOE, Colorado Petroleum Marketers Assoc, Small Retailers, Largest Independent Marketers, Office of Economic Development, Biodiesel and Ethanol Producers, Municipal Representatives, State Fleet Director

Mission



- Establish or expand the Biofuels infrastructure (+4x)
- Increase public awareness
- Stimulate Colorado biofuels industry
- Double the amount of E85 and Biodiesel sold

Barriers

GBC Identified Barriers to Biofuels Developments

Assembling Resources:

Make up of team, Meeting format, Decision making process,
Determine realistic goals, Perception that this was a government
run coalition, Funding

Biofuels Market and Education:

- Availability of fuels
- Pricing of fuels
- Overcoming biofuels misconceptions
- Identifying biofuels pump locations
- Public lack of information and knowledge



Approach



Created Coalition Consisting of Volunteer Stakeholders

- Represents consumers, air quality, environment, fuel distributors, ethanol/biodiesel producers, local government, station owners

Strategic Public/Private Partnerships

- General Motors
- U.S. DOE & Clean Cities
- State/Regional partnerships with automobile dealers, municipalities, fuel & retail marketers, Ag groups
- Colorado Corn Growers

Secured Support for Sites Adding Biofuels:

- Funding for infrastructure – matrix for different applications
- Technical expertise
- Marketing support

Approach



Outreach:

Created GBC Press Materials: Coalition Logo, GM Advertisements, website, grand opening press kits

Host Grand Openings: Governor and local elected officials attended, secured media coverage

Strategic Media Placement

Strategic Planning

- Coalition developed milestones
- Involved partners to share responsibilities and ensure success

Funding Portfolio:



DOE Grant :

\$388,000 reimbursable with total project at
\$1,092, 000 including in-kind value

Portfolio:

- ❑ Petroleum Violation Escrow(PVE) funding \$300,000 to help large marketers to make a quick impact
- ❑ PVE & State Energy Plan (SEP) \$220,000 for funding independents, local governments, and smaller retailers
- ❑ CMAQ funding through the Regional Air Quality Council and Colorado Corn (\$200,000 reimbursable)
- ❑ General Motors (GM) assistance with outreach, pump openings, promotional events

How It Works



- Project funding is 35% of net cost after tax incentives or a maximum of \$15,000 for E85 and \$10,000 for biodiesel
- Applicants fill out interest form on GEO website
- Steering committee reviews applications
- Monthly meetings allow for committee votes
- GBC contacts applicant on outcomes
- If awarded, purchase order is created
- 90 days to complete work
- Station Grand Opening Event is held
- Final Report is submitted with invoices and receipts, PO is paid
- Station owners submit quarterly reports on volume

Performance Measures



Infrastructure Development:

- Increased from 11 biofuels stations to over 50 by end of 2007. Currently there are 60.
- Major retailer committed to offering E85 & Biodiesel at 20 more station in the next 12-18 months.



Performance Measures- Funding

DOE Funded Sites:

- DOE Grant funding provided support to two biofuels stations that have both E85 and biodiesel for 2007. *Funding to each site:*

Vendor Match: Hill: \$41,745.00 & Norwood

Evergreen: \$19,925.00

DOE Funding: Hill: \$44,145.00 & Norwood

Evergreen: \$22,890.00

- **Grant's In-kind Hours:** Total match hours for the first year was exceeded by almost 46 hours: 2,380.00 required and 2,472.47 was recorded.
- **Grant's Total match dollars:** Exceeded by \$7,384.57. Both of these numbers reflect the exceptional support contributed by the GBC members to this project.

Performance Measures- Outreach

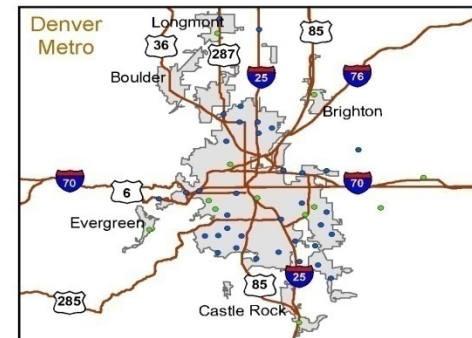
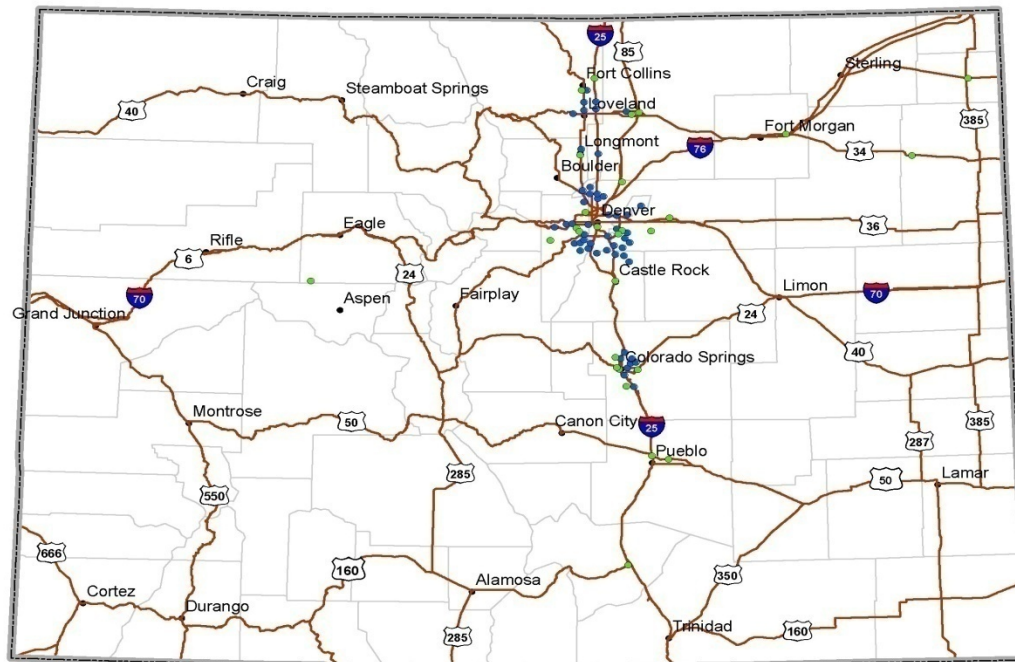
Outreach Events:

- Held over 15 Grand Openings statewide
- Governor, GM, and DOE held kickoff at the meeting at State Capitol, Feb 2007
- Governor attended 2007 50th station milestone celebration
- Biofuels outreach held at Automobile Dealer events & other energy-focused community events
- Rocky Mountain News ran series on ethanol, Ag Radio outreach, Advertising with promotional partners



Station Siting

Colorado - Proposed E85 Infrastructure Top 51, with 2 mile exclusion radius



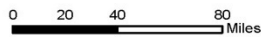
Gasoline Stations

- Existing E85
- Primary Station

Neighbor exclusion
radius of 2 miles.



Sep 2007

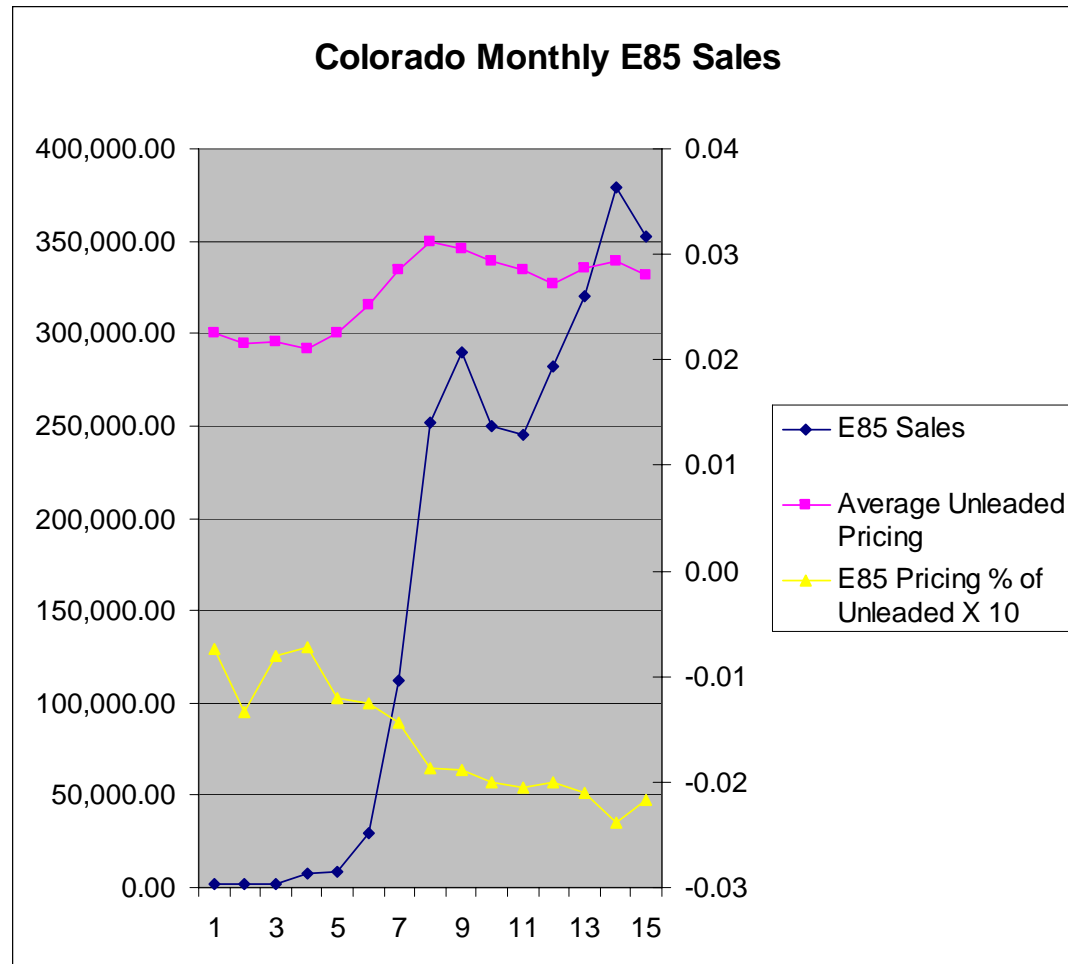


Colorado E85 Sales



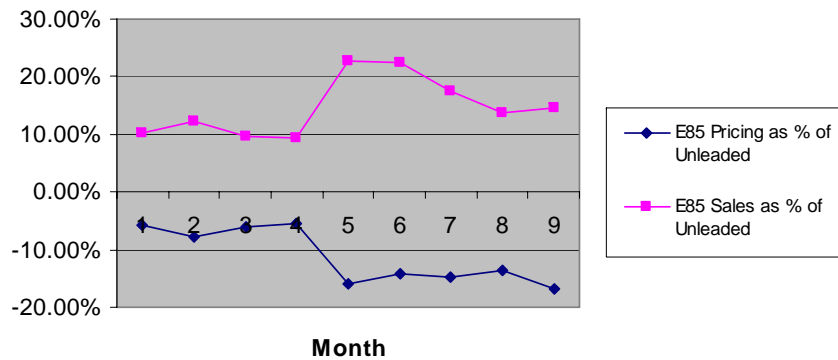
As of December 2007, over 350,000 gallons per month of E85 was being sold in Colorado.

The average E85 pricing was approximately 20% lower than unleaded gasoline.



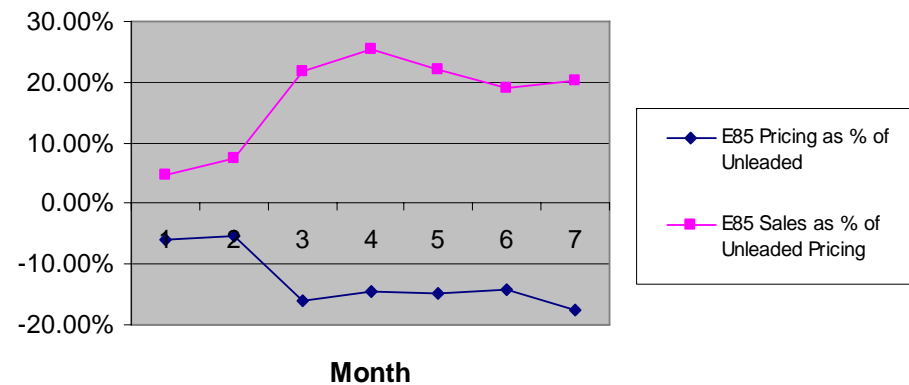
E85 Sales as a Function of Pricing

Relationship Between Pricing and E85 Volume
Station 2



Pricing differential between E85 and unleaded directly affected E85 sales.

Relationship Between Pricing and E85 Volume
Station 1



Technology Transfer



GBC Funding Matrix

- ❑ New funding matrix created for municipalities, which do not receive federal & state tax incentives

NREL Case Study

- ❑ Colorado Biofuels Coalition is used as a template for other states looking to duplicate our success and infrastructure efforts

Underwriters Laboratory Certification

- ❑ Colorado was able to work to resolve this E85 certification issue which was used as one model to help AHJs on a national scale

State Exchanges

- ❑ Seven states have received information on GBC and programs
- ❑ Recommendation by Western Governor's Association of each state to adapt GBC type structure and infrastructure incentives

Activities for SFY 08-09



GBC's Strategic Plan Milestones for 2008-09:

Infrastructure:

- ❑ Increase the number of stations offering biofuels from 50 to 80.
- ❑ Double the amount of biofuels, as reported in 2007 (2 million gallons to 4 million gallons)
- ❑ Perform analyses to direct the development of biofuels usage in the state of Colorado.
- ❑ Leverage all funding, including DOE, PVE, SEP, RAQC to maximize impact

Communication & Outreach:

- ❑ Support and coordinate outreach events and activities
- ❑ Ongoing communication with GBC funding agencies on goal attainment

How Is it Going?



- First quarter 2008- one marketer is reporting over 980,000 gallons at his 12 stores
- 80 stations will be open by June
- Still have close to \$150,000 left to spend
- Market transformation is beginning
- Two local elected officials held their rallies at biofuels stations

- Stacey still has a job!

Lessons Learned



- ❑ Collaborate but don't be soft EXPECT RESULTS!
- ❑ Find Champions!
- ❑ Develop/find leaders based on their skills and resources
- ❑ TRACK, TRACK, TRACK all data, successes and identified barriers
- ❑ There is GOVT bznss and then there is bznss- GOVT MUST BE FLEXIBLE (????)
- ❑ Then there is municipal interests, NPO- again be flexible
- ❑ Stay on target- NO SCOPE CRAWL
- ❑ Keep the politics and lobbying in the hallway
- ❑ Leverage resources, beg for the rest
- ❑ Celebrate the successes!

Resources Available



- ❑ Frequently Asked Questions (Web)
- ❑ GBC Steering Committee Members (Web)
- ❑ Application and One Pager (Web)
- ❑ Volume Data Tracking Forms (Email)
- ❑ Timesheets (Email)
- ❑ Sample contracts (Email)
- ❑ Minutes and Agenda (Web)

- ❑ Contact Denver Metro Clean Cities, Pikes Peak Clean Cities and Northern Clean Cities for support



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***Thank you, D.O.E. And NREL for your support of the
Colorado's Governor's Biofuels Coalition!
Your support has been instrumental in all our success!***

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