

Promoting Ethanol Fuels in North Dakota
Final Report: Contract R003-008
July 1, 2009 — December 31, 2011

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Partners: American Lung Association in North Dakota, North Dakota Corn Council, North Dakota Ethanol Producers Association and members of the North Dakota Clean Air Choice Team.

Project Overview

The U.S. Energy Independence & Security Act of 2007 is a driving force for both the North Dakota and national markets toward growing use of ethanol fuels. This federal law, along with rising consumer demand for renewable fuels, offers an important opportunity to increase the interest in, demand for, and use of ethanol fuels by North Dakota drivers.

At the time of the proposal, the use of ethanol fuels was still relatively low in North Dakota, with significant opportunity to expand the number of drivers using ethanol fuels and the number of gallons used per-capita. The project aimed to change this by implementing a variety of consumer education methods including ethanol fuel promotions, educational activities at public events and earned and paid media to reach motorists throughout the state.

The activities outlined on the following pages, along with additional education tactics implemented by project partners and the state's blender pump assistance program, have all combined to achieve successful results that are significantly moving the state forward on increased use of renewable fuels, decreased emissions, increased energy independence and increased jobs, income and opportunities for North Dakota residents.

Results include a significant increase in the percentage of North Dakotans who are aware of the benefits and availability of ethanol fuels. A 2008 study showed only 24.3% of North Dakotans said they were at least "familiar" with E10 gasoline and only 21.1% were familiar with E85. A follow up study conducted in 2010 showed significant increases, with 48.3% stating they were at least "familiar" with E10 (98% increase) and 37.5% stating they were familiar with E85 (77% increase).

E85 sales have dramatically increased. In 2009, E85 sales averaged less than 23,000 gallons per month. In 2010, E85 sales averaged more than 55,000 gallons per month, and jumped to more than 110,000 gallons per month in 2011. This can be attributed to increased understanding of high blend ethanol fuels; increased availability of E85 and mid-level blends and increased availability of flex fuel vehicles.

Availability of E85 and mid-level ethanol blends in the state has also increased significantly. In 2009, ALAMN awarded E85 infrastructure grants to six retailers. Since then, the state blender pump program, along with funding from the North Dakota Corn Council, has provided funding for more than 50 additional locations.

Increased understanding of the benefits and availability of ethanol fuels has helped to spur North Dakota's continued progress with renewable fuels. State investment and ongoing educational efforts by partners are needed to ensure this growth is maintained and continues to provide additional benefits to our state and our residents.

ALAND and project partners began the *Promoting Ethanol Fuels in North Dakota* project on July 1, 2009, implementing a variety of methods to attract the attention of and further educate North Dakota motorists about the availability and benefits of E85 ethanol fuels. Activities included exhibiting at expos targeting fleets, the fuel industry and the general public, print and radio advertising and retailer promotions.

I. Ethanol Retailer Promotions

October 15, 2010: E85 - 85¢ less than gas; E30 - 60¢ less than gas
Petro Serve USA, Fargo, ND

August 25, 2010: E85 for \$1.85; 30¢ Off E30; 20¢ Off E20
Valley Dairy of Grand Forks, ND

August 19, 2010: Blender Pump Grand Opening/Ribbon Cutting
Tower Travel Plaza, Tower City, ND

June 18th, 2010: \$2 Off Fill Up of E85 or E30
Frontier Travel Center, Bowman, ND

November 13-15, 2010: 10¢ per gallon discount on E85
Farmers Union Oil Co, Forman, ND

August 19, 2009: 85¢ Off Per Gallon E85
Farmer's Union Oil of the Southern Valley, Wahpeton, ND

II. Exhibiting & Special Meetings

October 20-21, 2011: North Dakota Education Association Annual Conference • Bismarck, ND

September 22-24, 2011: North Dakota League of Cities Annual Conference • Fargo, ND

September 8, 2011: North Dakota Clean Cities Stakeholder Meeting • Grand Forks, ND

September 8, 2001: City of Grand Forks Green Team Meeting • Grand Forks, ND

July 26-27, 2011: Biomass Conference • Grand Forks, ND

June 1, 2011: North Dakota Clean Cities Stakeholder Meeting • Bismarck, ND

April 27, 2011: Renewable Materials Summit: Emerging Markets in the Upper Midwest • Fargo, ND

February 2, 2011: NDARE Day at the Capitol • Bismarck, ND

January 25-28, 2011: KMOT Ag Expo • Minot, ND

October 20-21, 2011: North Dakota Education Association Annual Conference • Bismarck, ND

Sept. 20 - 21, 2010: Great Plains Energy Expo • Bismarck, ND

May 8-9, 2010: Green Expo • Fargo, ND

November 9-10, 2009: Great Plains Energy Expo • Bismarck, ND



October 27-28, 2009: ND Petroleum Marketers Association Annual Convention and Tradeshow Bismarck, ND

October 17, 2009: Women's Showcase • Fargo, ND

August 11, 2009: ND Ethanol Producers Association Golf Scramble; provided E85 door prize

July 14-15, 2009: Biomass Workshop • Grand Forks, ND

III. Paid Media Radio Advertising

During Winter 2011-2012, more than 700 :30 spots aired on 8 popular radio stations in Fargo, Bismarck, Grand Forks and Minot. The attention-getting ads educated listeners on the benefits of E85 ethanol fuels, the capabilities of flex fuel vehicles and how to tell if a vehicle is flex fuel capable.

During the week prior to Independence Day, 2011, more than 830 :30 radio spots ran on popular radio stations in Bismarck and Fargo. The ads reminded listeners to fuel their flex fuel vehicles with a cleaner, homegrown fuel choice.

A 10-month statewide radio advertising campaign highlighted the benefits of ethanol fuels on WZFG-AM The Flag. 297 :30 ads aired over the period, 117 aired statewide. Additional E85 mentions were given during sponsorships and special events.

In August, 58 spots on KBMW-AM advertised the Farmers Union Oil of the Southern Valley ethanol fuels promotion.



Homegrown Vrrrooom!
E85 85% Ethanol

E85 and intermediate ethanol blends are available at a growing number of stations in North Dakota.

As you travel this 4th of July weekend and throughout the year, fuel your flex fuel vehicle with a cleaner, largely renewable fuel made right here in North Dakota.

Find E85 at the following locations near you:

- Expressway C-Store • 3801 E Rosser Ave, Bismarck
- Genex • 1160 West Divide Ave, Bismarck
- StarMart • 1120 E Divide Ave, Bismarck
- Farmers Union Oil Co Genex • 615 Minnie Ave, Wilton

Flex fuel vehicles (FFVs) can use E85, gasoline or any blend of the two. For a complete list of E85/blender pump locations in North Dakota and to find out if you drive a flex fuel vehicle visit CleanAirChoice.org.

North Dakota Clean Air Choice Team
North Dakota Corn Council • North Dakota Renewable Energy Council
North Dakota Dept of Commerce • North Dakota Ethanol Council
North Dakota Ethanol Producers Association
General Motors Corporation • U.S. Department of Energy Clean Cities
American Lung Association in North Dakota

Newspaper Advertising

An ad in the Fargo Forum invited FFV drivers to attend the AFV Day Odyssey E85 and E30 promotion at Petro Serve USA at 3902 on Main Avenue in Fargo on October 15th, 2010.

Ads appeared in the local papers for blender pump grand opening events in Bowman, Grand Forks and Tower City, during the summer of 2010.

Large ads in newspapers across the state reminded flex fuel vehicle drivers to fuel with E85 and ethanol blends when filling up for 4th of July holiday travel in 2010. The ads provided names and addresses of stations in the surrounding area selling E85 and mid-level ethanol blend fuels.

Advertising in *The Daily Reporter* invited FFV drivers to the 85¢ per gallon discount in Wahpeton, ND on August 19th, 2009.

Advertising in *The Sargent County Teller* on November 6 and 13, invited FFV drivers to the 10¢ per gallon discount in Forman, ND, November 13-15, 2009.

In 2009, an ad in the North Dakota Petroleum Marketer's Yearbook reminded retailers that promotional opportunities were available through ALAND and project partners.

E85 and E30 have arrived in Bowman!

\$2.00 off E85 or E30 Fill-ups

E85 85% Ethanol

Friday, June 18th • 11 am - 1 pm
Frontier Travel Center
705 Highway 12
Bowman, ND • 701.523.4737
Clean. Renewable. Close to Home.

*E85 and E30 are for use in flex fuel vehicles (FFVs). FFVs use a special mix of gas and ethanol. Fuel fill labels indicate use. Call 800.345.USA or visit CleanAirChoice.org for more info.

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North Dakota Department of Commerce • North Dakota Renewable Energy Council
North Dakota Ethanol Producers Association • General Motors Corporation
U.S. Department of Energy Clean Cities

85¢ off per gallon of E85*

Wednesday, August 19th • 11 am - 2 pm
Wahpeton Genex
2019 North 9th Street
(on the 210 bypass, next to Hills 210 Cafe)
Wahpeton • 701.642.8035

E85 85% Ethanol

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Red River Valley Clean Cities Coalition

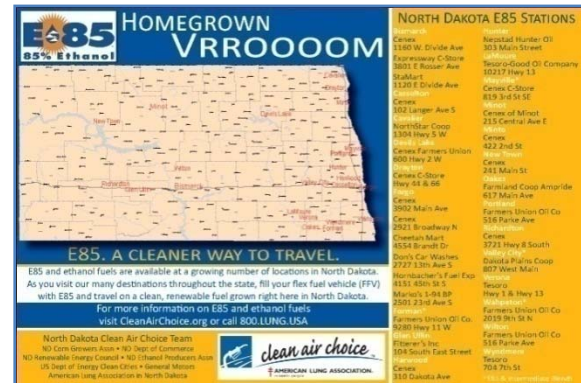
Clean. Renewable. Close to Home.

*E85 is for use in flexible fuel vehicles (FFVs). FFVs use E85 or gas interchangeably. Fuel fill decal indicates E85 use.
Call 800.LUNG.USA or visit CleanAirChoice.org for more information.

Other Print Advertising

Advertising in *Prairie Business Magazine's* January 2010 energy issue informed readers where they could fill up their FFVs with E85 and ethanol blends in North Dakota.

North Dakota Travel Guide: The 2010 travel guide provided visitors with the locations of North Dakota's E85 and blender pump fueling sites. Distributed in tourism bureaus, rest areas, and in the February edition of *North Dakota Living*, the ad was placed inside 325,000 travel guides.



Billboards

Over the project period, billboards along major highways and in downtown locations reminded motorists to drive renewably, support a homegrown fuel and increase the state's energy independence by choosing E85 ethanol fuel. Billboard campaigns ran winter 2011 – 2012, spring 2010 and winter 2009 – 2010.

IV. Earned Media

Media relations efforts in 2011 resulted in stories in the *Fargo Forum*, *Bismarck Tribune*, *Dickinson Press* and *Ethanol Magazine* and at least five television news stories on KFVR-TV, KMOT-TV, KQCD-TV and KUMV-TV. One of the biggest stories was North Dakota passing the 1 million gallon mark in annual E85 sales. Total media impressions for 2011: 486,830.

Every spring, the American Lung Association issues a national "State of the Air Report" on air pollution, grading states and listing the U.S. cities with the cleanest or the most polluted air. In 2009 and 2010, Fargo was named at the top of the cleanest cities list. The American Lung Association in North Dakota issued a news release focused on Fargo and North Dakota that specifically cited E85 as a clean air fuel. This news release resulted in a great deal of media coverage, including a statewide Associated Press story, an editorial and a news story in the *Bismarck Tribune*, and a feature on radio station KFGO-AM in Fargo. The State of the Air Report news release also mentioned the May 27 Ethanol Workshop at Bismarck State College, an event that earned news coverage of its own on Bismarck-based KFVR-TV. Ethanol's role in keeping North Dakota's air clean received national exposure when a *Forbes* associate editor later wrote a commentary on "America's Cleanest Cities," using our news release as a source. The *Forbes* commentary has been linked and reproduced in many media outlets since it was first posted on June 16th, 2010.

Other media coverage during the project period include a *Bismarck Tribune* story about the *Forbes* listing, stories about a Grand Forks blender pump opening in the *Domestic Fuel* blog and in *Dakota Student*, the NDSU student newspaper and a *Fargo Forum* article on a new E85 outlet in Tower City. Total media impressions for 2010: 687,508.



V. Website, Customer Service & Materials

- The North Dakota E85 & Blender Pump Directory was printed and distributed in October 2009, June 2010 and December 2011. Thanks to the rapidly increasing number of retailers in the state, the 2011 edition needed to be expanded to fit all the new sites. A supply of each edition was provided to each of the E85/blender pump sites to display and provide to customers.

- CleanAirChoice.org averages 1,100 hits per day with an average stay of more than 6 minutes. The E85 station locator is the most popular page of the site and is updated regularly by ALAND personnel.
- The E85 ethanol exhibit for educational events was updated to educate attendees about the benefits and availability of ethanol-based fuels and include the North Dakota Renewable Energy Council as a partner.
- 1 (800) LUNG-USA hotline for E85 ethanol information.
- Ethanol/E85 Frequently Asked Questions handout provided at exhibits and stations promotions.
- E85 vehicle decals and label stickers at station promotions and educational events.
- Clean Air Choice water bottles and E85 pens for giveaways at educational events.
- North Dakota Clean Cities publishes a biannual newsletter covering alternative fuel and advanced technology vehicle developments. The newsletter is distributed to fleet managers and decision makers throughout the state, and has highlighted the ethanol fuel promotions, new station openings, grant availability and new flex fuel vehicle models available.

VI. Ethanol Workshops & Meetings

North Dakota Clean Cities (formerly Red River Valley Clean Cities) held two stakeholder meetings in 2011 in Bismarck and Grand Forks. At each meeting North Dakota fleet representatives and other decision makers were introduced to alternative fuels, including ethanol blends, and provided with the benefits of utilizing ethanol fuels in their fleets or offering it as a fuel choice at a service station.

Personnel also joined the North Dakota Ethanol Council in meeting with Kupper Chevrolet in Bismarck to discuss dealership education opportunities including educating sales staff and mechanics on ethanol fuels and flex fuel vehicle operability; and placing educational materials inside vehicles to provide further information to customers at the point of sale. The coalition plans to meet with additional dealerships in the coming year.

North Dakota Clean Cities and the American Lung Association in North Dakota co-hosted an ethanol workshop with the Great Plains Energy Corridor on May 27, 2010 at the Bismarck State College Energy Center of Excellence. The workshop was part of a series of alternative fuel workshops taking place throughout the country with support of the U.S. Department of Energy. The workshop agenda is provided in the attachments to this report. A recording of the workshop is also available.

VII. E85 Fuel Sales

According to ND Tax Department reports, E85 sales in 2009 averaged less than 23,000 gallons per month. In 2010 monthly E85 sales averaged more than 55,000 gallons per month and more than doubled 2009 sales for the year. In 2011, monthly sales averaged more than 110,000 gallons per month and hit 1 million gallons by September. These numbers do not include mid-level ethanol blend sales, which are not recorded separately from E10 at this time.

VIII. FFVs in North Dakota

According to ND Department of Transportation, the number of FFVs registered in North Dakota has increased significantly. In May 2008, there were about 29,000 FFVs registered in North Dakota. As of 2011, there were 64,630 FFVs registered in the state.

IX. Upcoming Events

1/25-27/2012: KMOT Ag Expo

2/14-15/2012: KFYZ Agri International Trade Show

3/30-31/2012: Williston Home Show

4/1-15/2012: Dickinson Home Show



Bismarck Ethanol Workshop, pictured left to right: Don Kaiser, NDCC; Rich Cregar, Wake Tech Community College; Jeff Zueger, Blue Flint Ethanol; Deana Weise, ND Ethanol Council; Andrea Holl-Pfennig, ND Dept of Commerce; Tom Lilja, ND Corn Council; Kim Christianson, Great Plains Energy Corridor.

Thank you for your partnership!

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North Dakota Clean Air Choice Team

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US Department of Energy–Clean Cities • American Lung Association in North Dakota