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 U.S. Department of Energy
 Golden Field Office
 1617 Cole Blvd.
 Golden, Colorado 80401

March 30, 2012

Performance Report

Grantee: Clean Energy Coalition
Grant #: EE0003056
Report Period: Final Report
Grant Period: 01.28.2010 – 12.31.2011

Outcome 1	Project quickly set in motion	Progress
Task 1.1	Commence project outreach	100%
	<ul style="list-style-type: none"> Created and distributed a statewide press release, in coordination with the US Department of Energy, CPM, and DELEG BES Created, printed and mailed program information postcards to targeted fueling stations and public fleets Amended CEC's Biofuel Infrastructure grant web page to match the project's current scope and objectives, with a web-based application form, links to infrastructure equipment installers, information on tax credits and more 	
Outcome 2	E-85 pumps installed across the State of Michigan	Progress
Task 2.1	Review and approve projects for funding	100%
	<ul style="list-style-type: none"> Received, evaluated, and scored applications, giving preference to those projects which were located within one mile of interstate corridor exits, major connectors and intersections in or near large metropolitan areas Revised and distributed Subgrantee agreements 	
Task 2.2	Work with fueling station & public fleet owners to complete projects	100%
	<ul style="list-style-type: none"> Executed signed contracts with Subgrantees Provided follow-up support to station owners Updated existing marketing materials to include current information about fuel energy content, mileage impacts and greenhouse gas reductions Ensured that projects met all contract requirements Physically verified the completion of all projects and processed related payments 	
Task 2.3	Promote completed projects	100%
	<ul style="list-style-type: none"> Worked with CPM to provide logistical support in helping stations organize promotional events Submitted station addresses to alternative fuel databases, including Growth Energy and the U.S. Department of Energy's Alternative Fuel Data Center 	

Outcome 3	Project reporting & evaluation submitted to U.S. DOE	Progress
Task 3.1	Perform project reporting and evaluation to the Department of Energy	100%
	<ul style="list-style-type: none"> • CEC provided the DOE Program Officer with eight quarterly progress reports and one final report • Due to weather, CEC presented via live webinar at the DOE Biomass Program Peer Exchange on February 3, 2011 	

Final Scientific/Technical Report

The objective of this project was to financially assist and otherwise provide support to projects that increase E85 infrastructure in Michigan at retail fueling locations.

Over the two-year project timeframe, nine E85 and/or flex-fuel pumps were installed around the State of Michigan at locations currently lacking E85 infrastructure. A total of five stations installed the nine pumps, all providing cost share toward the project. By using cost sharing by station partners, the \$200,000 provided by the Department of Energy facilitated a total project worth \$746,332.85.

This project was completed over a two-year timetable (eight quarters). The first quarter of the project focused on project outreach to station owners about the incentive on the installation and/or conversion of E85 compatible fueling equipment including fueling pumps, tanks, and all necessary electrical and plumbing connections. Utilizing Clean Energy Coalition (CEC)'s extensive knowledge of gasoline/ethanol infrastructure throughout Michigan, CEC strategically placed these pumps in locations to strengthen the broad availability of E85 in Michigan. During the first and second quarters, CEC staff approved projects for funding and secured contracts with station owners; the second through eighth quarters were spent working with fueling station owners to complete projects; the third through eighth quarters will include time spent promoting projects; and beginning in the second quarter and running for the duration of the project, was spent performing project reporting and evaluation to the US DOE.

A total of 9 pumps were installed (four in Elkton, two in Sebawaing, one in East Lansing, one in Howell, and one in Whitmore Lake). At these combined station locations, a total of 192,445 gallons of E85, 10,786 gallons of E50, and 19,159 gallons of E30 were sold in all reporting quarters for 2011. Overall, the project has successfully displaced 162,611 gallons (2,663 barrels) of petroleum, and reduced regional GHG emissions by 375 tons in the first year of station deployment.

Although the installed station locations have realized significant petroleum and GHG emission reductions for the impacted regions of the state, the project was initially anticipated to produce an annual displacement of significantly larger proportions than the amount presently realized. In total, the project initially anticipated reductions of 840,000 gallons of petroleum, with a proposed aggregate reduction of 8.4 million gallons over a minimum 10-year equipment life cycle. Although the project initially produced sales along this proposed trajectory, the removal of a federally designated tax credit had a significant impact on the overall adoption rate of this fuel.

Job Creation

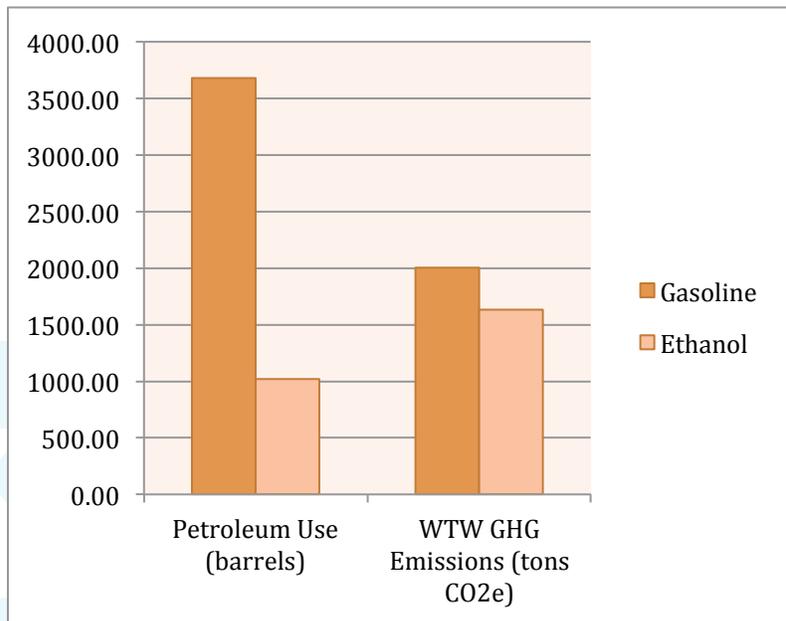
Considering the additional match project partners put toward the project, job creation for the project is estimated to be at least eight full-time jobs over the course of two years. During the fifth quarter alone, direct jobs attributable to the project were estimated at 2.5 full-time jobs, according to contractor payroll records.

Emissions and Petroleum Reductions

Although the removal of the federal tax credit has provided barriers for broad based regional adoption of blended ethanol fuels, significant reductions in both petroleum use and GHG emissions can be realized through the fuels continued promotion in consumer and fleet applications. The project helped realize significant savings in both petroleum use, and emissions reductions regionally. (Figure 1.2)

Figure 1.2

Ethanol Use Impact	Gasoline (Baseline)	E85 & Blends (Actual)	Reduction
Petroleum Use (barrels)	3682.19	1018.78	72%
WTW GHG Emissions (tons CO ₂ e)	2005.60	1631.23	19%



The reduction targets in emissions and petroleum use are highly aligned with national priorities, and help promote regional energy independence and environmental sustainability targets. Sales of ethanol blends for all project partners in 2011 reduced petroleum usage by 162,611 gallons, or 2,663 barrels of petroleum. To date, 375 tons of GHG emissions have been avoided due to the sale of ethanol-based fuel at the noted fueling locations.

Availability of Cost Competitive Biofuel Options

Although the removal of the E85 tax credit has had a profound impact on the overall cost incurred by the end fuel user, the recent incremental rise in gasoline prices regionally has positively influenced the cost competitiveness of E85 fuel. The most recent alternative fuel price report, published quarterly by the U.S. Department of Energy, reported a regional average of \$3.38 and \$3.12 for gasoline and ethanol respectively in October of 2011. Given the approximate 30% decrease in BTUs in Ethanol compared to gasoline, the October report reflects a higher price paid for the use of Ethanol over gasoline. More recent national data, reporting information from late February 2012, shows this gap to be narrowing, with some of the project partner stations offering E85 for as low as \$2.86 per gallon, versus \$3.69 for conventional gasoline product.

Sebewaing, Mich Station: Fuel Prices on Feb. 29, 2012

Regular Gasoline:	\$3.69
E85:	\$2.89

Elkton, Mich Station: Fuel Prices on Feb. 29, 2012

Regular Gasoline:	\$3.69
E85:	\$2.86

Addressing Biofuels Market Challenges and Barriers

Presently, E85 lacks the established regional infrastructure of petroleum based fueling stations, leaving ethanol at a disadvantage compared to conventional liquid transportation fuels that already have mature infrastructure. Some of the barriers to the installation and adoption of ethanol blends include:

1. Higher level ethanol blends, such as E85 (and other less compatible biofuels), require separate storage tanks and dispensers, and may require other material modifications at refueling stations.
2. Most refueling stations are privately owned with relatively thin profit margins, and owners have been reluctant to invest in new infrastructure until the market is more fully developed.
3. The scarcity of E85 refueling stations makes it difficult for consumers who own FFVs to use E85 and also makes it less likely that potential new consumers will purchase an FFV.

The project has worked toward absolving these infrastructure challenges through the installation of (5) additional E85 stations throughout the State of Michigan, with (9) pumps available at the combined station locations. The first two stations were recognized as Michigan's 99th and 100th E85 station respectively. In addition to conventional E85 fueling pumps, the project also helped to install Ethanol Blender Pumps, which provide additional fueling options for regional biofuel consumers. (1) E50 pump, (Blended 50% Ethanol and 50% Gasoline) and (1) E30 pump (Blended 30% Ethanol and 70% Gasoline), have been installed as a direct result of project funding.

Conclusions

Overall, E85 currently faces notable barriers to broad based regional adoption. In order to further encourage biofuel use regionally, it will be necessary to leverage the environmental benefits and national security interests aligned with the fuel's continued adoption. Although price does present a barrier, the incremental increase in the cost of petroleum-based fueling sources continues to make the fuel source increasingly competitive. The reinstatement of the federal tax credit, in tandem with continued increases in petroleum prices nationally, will help to establish ethanol as viable alternative for fleets and consumers looking to realize economic and environmental benefits from alternative fuel adoption.

Appendix I: Sub-Grantee Master Agreement

**Michigan E85 Infrastructure Subgrantee Agreement**

This Michigan E85 Infrastructure Subgrantee Master Agreement and its Attachments (altogether, the “Agreement”) is by and between the Clean Energy Coalition, a Michigan non-profit corporation located at 44 East Cross Street, Ypsilanti, MI 48198 (“CEC” or “Recipient”) and **Ignash Petroleum, LLC** a Michigan **private petroleum marketer** located at **5083 Whalen St., Elkton, MI 48731** (“Subgrantee”), and is effective as of the **01 day of September, 2010**.

WHEREAS, the American Recovery and Reinvestment Act of 2009, (“Recovery Act”) was enacted to preserve and create jobs and promote economic recovery, assist those most impacted by the recession, provide investments needed to increase economic efficiency by spurring technological advances in science and health, invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits, stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive State and local tax increases;

WHEREAS, CEC has been awarded funds from the U.S. Department of Energy under the Recovery Act (the “Grant,” “Award,” or “Award No. DE-EE0003056”) to partner with other entities on projects specified by the terms of the Grant (“Projects”) that will: (1) build blended ethanol infrastructure at public fueling stations to support ground transportation; (2) hold public events to educate the general public and individuals associated with the Projects; and (3) collect relevant data on the Projects; and

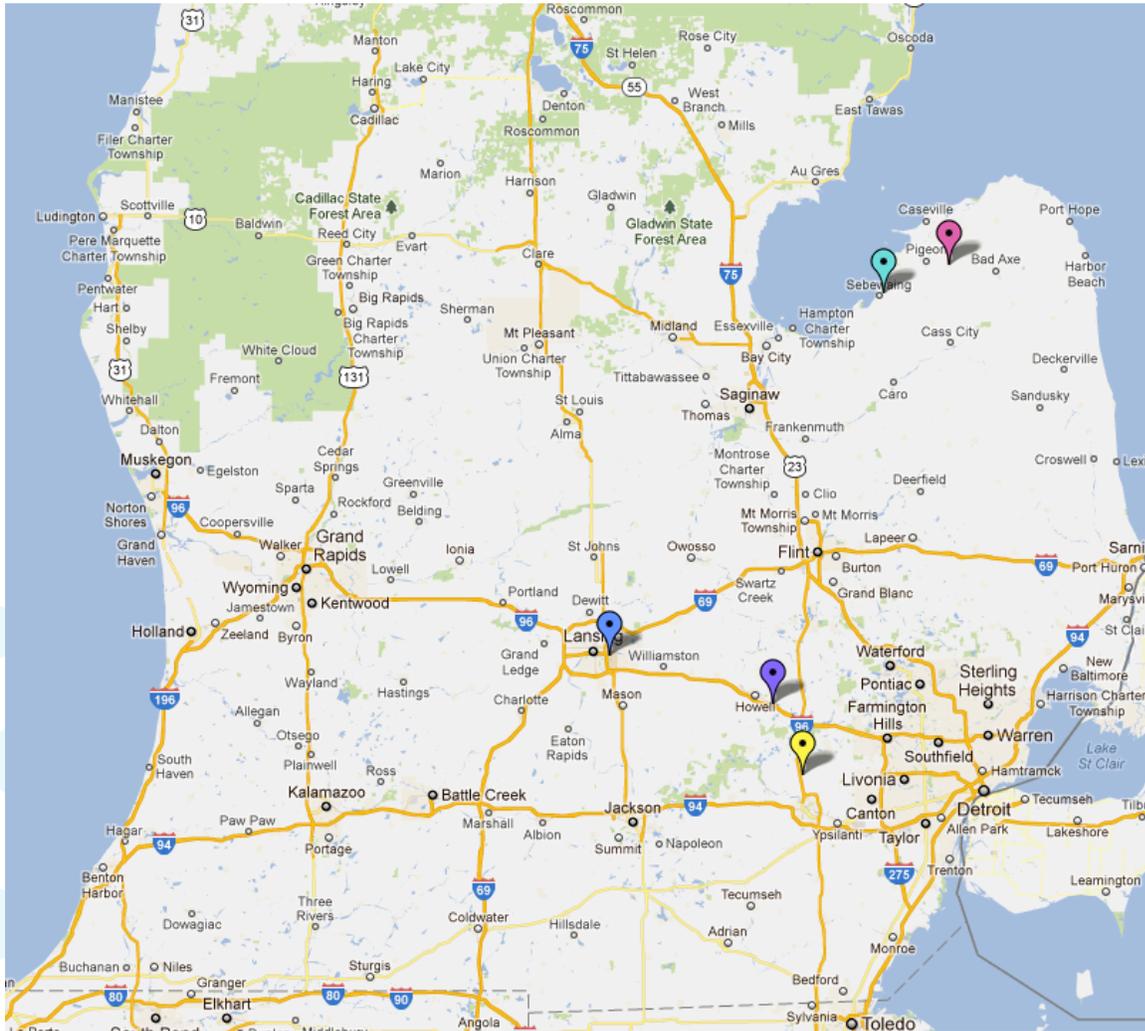
WHEREAS, Subgrantee agrees to use Grant funds in a manner that maximizes job creation and economic benefit; NOW THEREFORE, CEC and the Subgrantee agree to the following terms and conditions.

**ARTICLE 1
DEFINITIONS**

- 1.1. “**Agreement**” means the Michigan E85 Infrastructure Subgrantee Master Agreement between CEC and Subgrantee together with all attachments, exhibits, referenced governmental websites, and schedules, as all may be amended, restated, or supplemented from time to time.
- 1.2. “**CEC**” means the Clean Energy Coalition, also referred to as the “Recipient” in Grant documents, and is the party identified in the Agreement which is overseeing and managing all Work under Award No. DE-EE0003056.
- 1.3. “**Certificate of Completion**” means the statement and supporting documentation that Subgrantee must submit to CEC prior to Subgrantee’s reimbursement for its Work certifying to CEC that Subgrantee has met all requirements of its Work as of the stated Milestone Date. Whether or not Subgrantee has met all the requirements of its Work is subject to CEC’s sole reasonable discretion.
- 1.4. “**Change Order**” means a document issued and executed by CEC to Subgrantee to change some aspect of the Work described in the SOW.
- 1.5. “**Designated Representative**” means the duly authorized representative for each party, who will provide the general administration of this Agreement on behalf of CEC and shall be Subgrantee’s field representative in all matters related to Subgrantee’s Work. Subgrantee’s Designated Representative does not have authority to unilaterally amend or waive any portion of this Agreement. CEC may change its Designated Representative at any time with a fully qualified replacement. Subgrantee may change its Designated Representative at any time with a fully qualified replacement upon reasonable prior written notification to CEC.
- 1.6. “**Equipment**” means all materials, apparatus, equipment, goods, tools, component parts and supplies purchased pursuant to a Specific Project under this Agreement.
- 1.7. “**Jobsite**” means the location of the Work or Services as described in the SOW.

Appendix II: Completed Station Map:

-  **5083 Whalen St.**
Elkton, MI 48731
-  **969 Pine St.**
Sebewaing, Michigan 48759
-  **366 E North Territorial Rd**
Whitmore Lake, MI 48189
-  **4525 E Grand River Ave**
Howell, MI 48843
-  **1198 S Harrison Rd**
East Lansing, MI 48823



Appendix III: Station Budget

Michigan E85 Infrastructure Final Capital Expenses				
Location	# of pumps	Station Cost	DOE Share	Cost Share
969 Pine, Sebewaing, Michigan	4	\$260,572.10	\$32,000.00	\$228,572.10
5083 Whalen St., Elkton, Michigan	2	\$266,200.56	\$64,000.00	\$202,200.56
366 E. North Territorial Rd. Whitmore Lake, Michigan	1	\$51,178.24	\$16,000.00	\$35,178.24
4525 E. Grand River Ave., Howell, Michigan	1	\$50,698.00	\$16,000.00	\$34,698.00
1198 S. Harrison, East Lansing Michigan	1	\$49,895.00	\$32,000.00	\$17,895.00
Total	9	\$678,543.90	\$160,000.00	\$518,543.90

Appendix IV: Grand Openings

Cooperative Elevator Grand Opening: November 10, 2010: Clean Energy Coalition and Corn Marketing Program of Michigan congratulating station manager.



J&H Oil Company:



Elkton One Stop: November 10, 2010: MI State Rep. Kurt Damrow educating consumers at the pump.



Corrigan Oil:



Elkton One Stop: \$1.85 for E85 during Grand Opening



Appendix V: Marketing and Public Relations
Pump Signage

U.S. DOE Recovery Act Project



clean energy
coalition

bridging needs. advancing change.

cec-mi.org

E85

For Flex-Fuel
Vehicles Only

Press Release: Elkton and Sebewaing

For Immediate Release
March 21, 2011Contact: Jamie Wilson
Phone: (517) 668-2676**Michigan Welcomes Two New E85 Stations and Relief at the Pump**

LANSING, MICH. – As gasoline prices continue to rise, drivers are reminded of the high price of our foreign oil addiction – and they're looking for an alternative. On Tuesday, March 15, Michigan welcomed an alternative at two Corrigan Oil gas stations; E85 (85 percent ethanol/15 percent gasoline) ethanol pumps.

The stations, located in Whitmore Lake and Howell, will now offer consumers E85, a renewable, domestically-produced fuel made from American-grown corn. Although ethanol is already commonly blended in 90 percent of the nation's fuel supply in the form of E10 (10 percent ethanol/90 percent gasoline), higher blends of ethanol such as E85, can only be used in flexible-fuel vehicles (FFVs). FFVs are built to operate on any type of fuel ranging from ordinary gasoline to E85, and are growing in popularity with more than 8 million already on the roads today. Ethanol blended fuels are inherently cleaner than gasoline and decrease harmful tailpipe emissions of carbon monoxide, particulate matter, nitrogen oxides and other greenhouse gases by 48 to 59 percent. In addition to its environmental benefits, the production of American corn-ethanol creates thousands of full-time jobs across the U.S. and directly displaces crude oil that would otherwise need to be imported from unstable sources at increasing costly prices.

With so many advantageous reasons to use ethanol and more than one million FFVs sold in the U.S. each year, fuel innovators like Corrigan Oil realize that the demand for ethanol blends continues to increase. To help facilitate this growing need, the U.S. Department of Energy (DOE) made Recovery Act funds available for the expansion of ethanol infrastructure across the country. With just over 100 E85 stations throughout the state, the Clean Energy Coalition (CEC) of Ypsilanti recognized that Michigan would benefit from the addition of ethanol fueling stations. The CEC partnered with the Corn Marketing Program of Michigan (CMPM) and secured \$200,000 of the DOE Recovery Act grant money for the purpose of expanding ethanol infrastructure in our state. Both Corrigan Oil sites, in addition to three other sites, received funding from the CEC to help install the new E85 pumps.

The stations mark the 102nd and 103rd E85 fueling sites in Michigan and are the 3rd and 4th Corrigan Oil sites to install such pumps. To commemorate these great achievements, the CEC and CMPM joined together with the two stations to host grand opening ceremonies on March 15. In addition to discounted fuel (E85 for \$1.85 and \$2.99), each ceremony was kicked off by remarks from dignitaries which included: Robert Clearly, Vice President for the Michigan Petroleum Association; Jon DeAngelis, General Manager for the Corrigan Oil Company; Lacey Dixon, Director of Member and Industry Relations for the American Coalition for Ethanol; Kali Fox, Regional Manager for Senator Stabenow; Jody Pollok-Newsom, Executive Director of the CMPM; Matt Sandstrom, Mobility Division Manager for the CEC.

(more)

Media Advisory: Corrigan Oil – Whitmore Lake and Howell

◆ MEDIA ALERT ◆

Michigan Welcomes Two New Ethanol Fueling Stations

- WHEN:** Whitmore Lake Grand Opening Ceremony Howell Grand Opening Ceremony
Tuesday, March 15, 2011 Tuesday, March 15, 2011
10:30 – 11:30 a.m. 1:30 – 2:30 p.m.
Discounted E85 Fuel Discounted E85 Fuel
9:00 a.m. – Noon 1:00 – 4:00 p.m.
- WHERE:** Corrigan Oil Southeast Sunoco Station, 366 E. North Territorial Road, Whitmore Lake, MI 48189
Corrigan Oil Cascardo Oil Station, 4525 E. Grand River Avenue, Howell, MI 48843
- WHAT:** The Corn Marketing Program of Michigan (CMPM), the Clean Energy Coalition (CEC) and one of Michigan's leading fuel retailers – Corrigan Oil – will be joining together on Tuesday, March 15, to celebrate the grand opening of two ethanol pump facilities in Michigan.

The stations, located in Whitmore Lake and Howell, will now offer consumers E85 (85 percent ethanol/15 percent gasoline), a renewable, domestically-produced fuel made from American-grown corn. Although ethanol is already commonly blended in 90 percent of the nation's fuel supply in the form of E10 (10 percent ethanol/90 percent gasoline), higher blends of ethanol such as E85, can only be used in flexible-fuel vehicles (FFVs). FFVs are built to operate on any type of fuel ranging from ordinary gasoline to E85, and are growing in popularity with more than 8 million already on the roads today. Ethanol blended fuels are inherently cleaner than gasoline and decrease harmful tailpipe emissions of carbon monoxide, particulate matter, nitrogen oxides and other greenhouse gases by 48 to 59 percent. In addition to its environmental benefits, the production of American corn-ethanol creates thousands of full-time jobs across the U.S. and directly displaces crude oil that would otherwise need to be imported from unstable sources at increasing costly prices.

With increasing threats to our nation's energy security and a growing addiction to foreign oil, the State of Michigan is taking great strides to expanding the use of alternative fuel technologies. With both economic and environmental benefits and a growing supply of FFVs (an additional one million FFVs are sold in the U.S. each year), ethanol infrastructure has been one of the most important priorities for the State and the CEC, which works to advance clean energy technologies throughout Michigan. As such, the CEC was thrilled to secure a \$200,000.00 grant in 2010 from the U.S. Department of Energy (DOE) to be used to increase ethanol-fueling infrastructure across the state. Each of the Corrigan Oil sites received funding from the CEC as a result of the DOE grant.

To commemorate the grand opening of these two new sites, a public event has been planned for Tuesday, March 15 at each of the sites. The first ceremony will be held at the Corrigan Oil Southeast Sunoco Station in Whitmore Lake at 10:30 a.m. The second grand opening ceremony will be held at the Corrigan Oil Cascardo Oil Station in Howell at 1:30 p.m. Guest speakers at the events will include: Robert Cleary, Vice President of the Michigan Petroleum Association; Jon DeAngelis, General Manager for the Corrigan Oil Company; Lacey Dixon, Director of Member and Industry Relations for the American Coalition for Ethanol; Jody Pollok-Newsom, Executive Director of the CMPM; and Matt Sandstrom, Mobility Division Manager for the CEC. Also invited to speak at the event but not yet confirmed are: U.S. Senator Debbie Stabenow; Congressman Tim Walberg; State Senator Joe Hune; State Senator Rebecca Warren; Representative Cynthia Denby; and Representative Mark Ouimet. An agenda for each event is attached. In addition to the grand opening events, each station will also offer discounts on E85 fuel.

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(For more information, contact Jamie Wilson at the CMPM by calling (517) 668-2676 or at (231) 679-4296 the day of the event.)

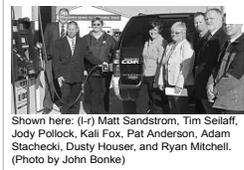
Press Coverage: Sebewaing

Newsweekly | huroncountypress.mihomepaper.com | The Huro...

<http://huroncountypress.mihomepaper.com/news/2010-11-17/N...>

Coop Elevator installs blender pump in Sebewaing

By John Bonke
Staff Writer 810-452-2668 • jbonke@mihomepaper.com



Shown here: (l-r) Matt Sandstrom, Tim Seilaff, Jody Pollock, Kall Fox, Pat Anderson, Adam Stachecki, Dusty Houser, and Ryan Mitchell. (Photo by John Bonke)

SEBEWAING - Cooperative Elevator Company officially opened its newest fueling facility just north of Sebewaing on M-25 on Wednesday, Nov. 10. The facility features a "blender pump," just one of three in the entire State of Michigan, offering E10, E30, E40, E50 and E85. This facility continues an effort, begun in 2006, by the elevator to offer E85 ethanol from corn to expand markets for the crop. A blender pump allows the consumer to choose the amount of ethanol in the fuel.

"We've been selling E85 since 2006 and invested in a fleet of flex fuel vehicles that run on E85. By adding E85, it has added value to our corn commodities produced by our members, therefore

supporting our farmers and advancing the value of our membership. We've made an investment in alternative fuels to support our members markets. We, as a farmer-owned cooperative, wanted to support ethanol and bio-based fuels to support members by using commodities they deliver to us," said Coop Elevator Vice President of Petroleum Tim Seilaff.

And while the blender pump is in place and in use, a different kind of work is happening. Prices for both ethanol and gasoline fluctuate giving flex-fuel vehicle owners an opportunity to weigh this against miles per gallon and choose accordingly.

"I believe that the blender pump is a great choice because it gives consumers options. But if we are truly trying to free ourselves of energy independence, we should continue to promote and expand blender pump and E85 locations. Some consumers may be confused when it comes to which blend of ethanol they should use and what mileage their vehicle may get in order to be more efficient. Education is the key, said Seilaff.

According to the American Coalition for Ethanol, since 1982, all U.S.-manufactured vehicles have fuel systems that are E10 ethanol compatible, with no modifications or special additives required. They state E10 is EPA-certified to reduce carbon monoxide emission by 30 percent and provides higher horsepower than gasoline at virtually identical miles per gallon.

Seilaff noted all gasoline in Michigan is actually blended with ethanol. He notes, according to the EPA, vehicles manufactured in 2007 to recent models could run on an E15 blend.

Seilaff added consumers interested in purchasing a flex-fuel vehicle (FFV) can now visit their local vehicle dealer in the Thumb as manufacturers now are producing and offering FFVs. There is a list of available models through Growth Energy at growthenergy.org. He also said the Growth Energy site keeps upto date with recent developments and is one of the best sources of ethanol information.

Part of the funding for the facility came in the form of a \$25,000 check from POET BioRefining. POET BioRefining General Manager Dave Gloer was on hand for the occasion. The POET BioRefining plant located in Caro produces 53 million gallons of ethanol annually and is the 14th ethanol plant built by POET, which began building ethanol plants in 1983. Ethanol production by POET BioRefining, Caro, uses nearly 16 million bushels of corn from the region and provides environmentally-friendly fuel and high-quality livestock feed for local, regional and national markets. Also providing funds for the facility the Clean Energy Coalition, a non-profit, non-partisan organization dedicated to promoting clean energy technologies as a way to create healthier, energy independent communities. Coalition Project Manager Matt Sandstrom was on hand for the event. The ethanol fueling equipment at Cooperative Elevator Company was partially funded by a Recovery Act award from the U.S. Department of Energy. The project, "Michigan E85 Infrastructure," is administered by the Clean Energy Coalition in partnership with the Corn Marketing Program of Michigan. Jody Pollock, CMPM Executive Director also was present.

The Coalition was formed by the stakeholders of the Ann Arbor Area Clean Cities Coalition as a new nonprofit entity to house and expand upon the work of the Ann Arbor Clean Cities program. The goal of the Michigan E85 Infrastructure project is to financially assist and otherwise provide support to projects that increase E85 infrastructure at retail fueling locations in Michigan. Over the twoyear project timeframe, 10 or more pumps will be installed around the State of Michigan at five locations lacking E85 infrastructure. Clean Cities states it and its 87 coalitions are on track to reach 2.5 billion gallons of gasoline displaced per year in 2020, exceeding the Clean Cities' goal of 2.5 billion gallons per year by 23 million gallons.

Also present at the event were: Coop Elevator CEO Pat Anderson, Dusty Houser, for Senator Carl Levin; Kall Fox, for Congresswoman Debbie Stabenow; Adam Stachecki, for Candice Miller; Ryan Mitchell, for Representative-Elect Mike Green; and Huron County Commissioners Clark Eftman and John Horny.

According to the Corn Marketing Program of Michigan, there are five ethanol plants in Michigan producing 250 million gallons of ethanol per year from corn. They also note, Michigan consumers use five billion gallons of petroleumbased gasoline per year; nationally the figure is 140 billion gallons per year. In the United States in 1980, 70 million bushels of corn were used in ethanol production, according to CMPM, compared to 2.3 billion in 2007, which was more than 20 percent of all corn grown that year. The CMPM noted, as of July 2008, there were 64 locations in Michigan selling E85, with two of those, Pigeon and Ruth, being in the Thumb. There are about 3,000 E85 and blender pumps across the country, according to