Electrify Heartland Plan

Section 8: EV Benefits and Incentives Promotion Plan

Project title: Kansas – Missouri
Community Readiness for EV and EVSE

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By: Metropolitan Energy Center

and Kansas City Regional Clean Cities Coalition

With: Black & Veatch

Metropolitan ENERGY CENTER

Kansas City Regional Clean Cities

BLACK & VEATCH

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Electrify Heartland Plan

Electrify Heartland Project Abstract

Electrify Heartland is an electric vehicle planning project managed by Metropolitan Energy Center. It is a product of the Greater Kansas City Plug-In Readiness Initiative, co-chaired by Kansas City Regional Clean Cities Coalition. Our goal is to produce a regional plan to prepare public resources and secure the economic and environmental benefits of plug-in vehicles within targeted metro areas with estimated 2.7M population. The targeted metro areas include Kansas City, MO & KS; Jefferson City, MO, Wichita, KS; Salina, KS; Lawrence, KS; and Topeka, KS. (14 Counties: Cass, Clay, Cole, Douglas, Jackson, Johnson, Leavenworth, Miami, Platte, Ray, Saline, Sedgwick, Shawnee, Wyandotte).

Electrify Heartland Steering Committee

Team	Organization	Name
Charging Stations	Initiatives	Troy Carlson
Charging Stations	LilyPadEV	Larry Kinder
Charging Stations	Logios	Gustavo Collantes
Government Policy	Polsinelli Shughart PC	Alan Anderson
Government Policy	Black & Veatch	Bill Roush
Project Administration	Metropolitan Energy Center	Ruth Redenbaugh
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Public Education	Nation Ranch Marketing, Inc.	Bill Patterson
Training	Kansas City Kansas Community College	Bob McGowan
Training	National Electrical Contractors Association	Jim Cianciolo
Utility Grid	Black & Veatch	Sam Scupham
Vehicle & Fleet	University of Missouri at Kansas City	Henry Marsh

Exhibit i-i. Electrify Heartland Steering Committee Members

Section 8: EV Benefits and Incentives Promotion Plan

Section Abstract

In order to make Electric Vehicle adoption more realistic there have been federal incentives developed for consumers to promote purchase. Another means of promotion, which is discussed in this section is education. Through both testimony and savings calculations cost can become an incentive instead of a barrier. This section discusses what actions have been taken throughout the run of this project- developing a website, running a promotional contest, posting videos, forming partnerships with utilities and meeting with elected officials, representatives of city government and concerned citizens.

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8 EV Benefits and Incentives Promotion Plan

8.1 Deliverables to address for incentive and promotion planning

Purchase price and range anxiety are anticipated to be the largest obstacles to widespread electric vehicle adoption for the foreseeable future.

To address these concerns, the Federal government has developed incentive programs to make electric vehicles more cost-competitive with their internal combustion engine competitors, and has joined forces with local governments and the private sector to promote installation of electric vehicle supply equipment (EVSE).

Neither Kansas nor Missouri currently offers tax incentives or rebates over and above the Federal $7,500 tax credit for those purchasing electric vehicles, nor are there any state incentives for companies that purchase electric fleet vehicles.

There currently is no evidence to suggest that either state will implement incentive programs in the foreseeable future, although many states, including Colorado, are offering tax rebate incentives for the purchase of electric vehicles over and above those offered by the Federal government, which could lead other states, including Kansas and Missouri, to follow suit.

"..our recommendations for electric vehicle promotion center on public education through the first-hand experiences of early adopters who have realized significant benefits from owning and operating electric vehicles."

On the other hand, we anticipate greater consumer and fleet demand for electric vehicles as additional electric vehicle options become available and as vehicle and battery manufacturers achieve the economies of scale necessary to reduce electric vehicle prices.

Additionally, evidence suggests that the more consumers know about the benefits of driving and owning electric vehicles and how electric vehicles are congruent with their existing driving habits, the more likely they are to consider purchasing and owning an electric vehicle.

For these reasons, our recommendations for electric vehicle promotion center on public education through the first-hand experiences of early adopters who have realized significant benefits from owning and operating electric vehicles.

8.2 Consider audiences for incentive and promotion planning

Primary audiences for incentives and promotion planning include the following:

- Fleet operators
- Automobile dealerships and sales representatives
- Members of the news media
- Consumers

While tax credits and other incentives have spurred adoption of electric vehicles by fleet owners and consumers alike, the larger business case in favor of electric vehicles over their internal combustion engine counterparts continually comes into clearer focus.

As more real-world information about the cost benefits of replacing gasoline and diesel vehicles with electric is analyzed, our ability to successfully promote and leverage existing incentives for electric vehicles will increase accordingly.

Major fleet operators, such as Pacific Gas & Electric and FedEx Corporation, have embarked on major campaigns to test the viability of alternative fuel vehicles in real-world applications, and have become willing to share their findings with other fleet operators. See sample fleet business cases in Appendix J.

On the consumer side, electric vehicle owners are tremendous evangelists for the performance and cost-savings associated with EV ownership, and their testimonials continually make their way into the public domain via social and mainstream media, thereby generating incremental interest among the general public.

8.3 Develop education plan for fuel cost savings

The Department of Energy's Alternative Fuels and Data Center (AFDC) already offers a fuel savings calculator on its Website, www.afdc.energy.gov/calc/, which enables consumers to determine the return on the higher cost of an electric vehicle compared to a traditional internal combustion engine vehicle.

Electrify Heartland recommends adapting this calculator and incorporating this technology on the Electrify Heartland Website, www.electrifyheartland.org, to enable consumers in the planning region to conduct their own calculations based on the price of gasoline in their neighborhood, as well as prevailing rates for electricity from their local utility.

Cost savings in the Electrify Heartland planning area will likely be significantly higher than in other parts of the country due to the relatively low rates most consumers pay for electricity, thereby reducing the time required for an electric vehicle owner to realize operating savings that offset the extra costs of the vehicle.

As stated in the previous section, as additional real-world cost savings data become available, the ability to leverage these case studies to promote electric vehicle adoption by both fleet operators and individuals will increase.

8.4 Develop environmental/greenhouse gas/energy security benefit education

Electric vehicles eliminate emissions that contribute to ground level ozone in metropolitan areas where air quality increasingly violates Clean Air Act standards, particularly in the hot summer months.

Although concerns remain about the use of coal to produce electricity in the Electrify Heartland planning region (the so-called "long tailpipe" argument), annual CO_2 emissions from electric vehicles are significantly lower than their gasoline-burning counterparts, a fact that one can easily discern using the AFDC's vehicle cost calculator.

In rural areas especially, energy security is a major selling point for electric vehicles compared to their gasoline-burning competitors. The electricity used to power these vehicles is produced in Kansas and Missouri, using fuels that that are sourced in the United States.

Additionally, Kansas now ranks third nationally in wind energy, and "Kansas also has more wind energy construction projects underway than any other state, with at least 663 new turbines set to be installed and nearly $3 billion of new investment from 2011 to the end of 2012"[1].

BP Wind Energy currently is building the state's largest wind farm, an $800 million investment that will include 300 wind turbines capable of powering about 125,000 homes across the country[2].

8.5 Develop maintenance/parking benefits

Electric vehicles owners not only save money by not purchasing gasoline, they also get savings due to sharply lower maintenance costs.

As outlined above, educational videos and the AFDC's vehicle cost calculator should be used to enhance awareness for the money electric vehicle owners save on maintenance.

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1 Brownback, Sam. "Governor Brownback Addresses WINDPOWER 2012 Conf." *Kansas: Office of the Governor*. Kansas Sam Brownback, 4 June 2012. Web. 10 Dec. 2012. <http://governor.ks.gov/MEDIA-ROOM/MEDIA-RELEASES/2012/06/04/GOVERNOR-BROWNBACK-ADDRESSES-WINDPOWER-2012-CONFERENCE>.
2Ellis, Blake. "Farmer Cashes in on Wind and Oil Royalties." *CNN Money*. Cable News Network, 6 June 2012. Web. 10 Dec. 2012. <http://money.cnn.com/video/news/2012/06/01/n-farmer-wind-oil-royalties.cnnmoney/>.

As outlined in Section 6.3 of this plan, Electrify Heartland recommends that local communities consider promoting the placement of EVSE in locations that are convenient and accessible, but not necessarily in the most prominent or advantageous locations.

Preferred parking for electric vehicles can be a double-edged sword for property owners and the electric vehicle industry alike, as prominently placed and little-used "EV only" parking spaces could spark a consumer backlash.

8.6 Promote incentives for EV and EVSE

Electrify Heartland in summer of 2012 sponsored a Facebook promotion, "Where in the Heartland is EVSE?" designed to heighten the public's awareness about the number and location of electric vehicle charging stations in the planning region.

The contest featured photographs of nearly three dozen charging stations, and donated prizes, such as Kansas City Royals baseball tickets and AMC Theatres movie passes, to those who correctly guessed the location of each charging station.

In doing so, Electrify Heartland accomplished three major goals:

- Enhanced awareness among consumers in the planning area for the growing number of publicly available charging stations to serve electric vehicle owners.
- "Rewarded" private businesses, such as Walgreen's and area auto dealerships, by showcasing their EVSE installations.
- Increased the level of consumer engagement with the Electrify Heartland program via Facebook and the Electrify Heartland Website.

Additionally, Electrify Heartland is working in partnership with utility partners, such as Westar Energy, to promote their efforts to install EVSE in cities and towns throughout the planning area.

8.7 Develop webinars for EV and EVSE audiences

Perhaps the most powerful way to convey key messages about the benefits of electric vehicles is through Web-based video, which allows stakeholders to "show" as well as "tell" the EV story.

We recommend developing a series of webinars, which could include content as simple as narrated Power Point presentations or as complex as professionally produced videos, to quickly provide news and information about electric vehicles and EVSE to key audiences including:

- Business and property owners considering EVSE installation

- Elected officials and civic leaders
- Auto dealers and sales representatives
- Members of the news media
- Consumers

8.8 Educate public officials on EV benefits and challenges

The Electrify Heartland team has held public meetings with elected officials, representatives of city government and concerned citizens in the following Kansas communities in the planning area, with additional "road show" meetings scheduled in the future:

- Lawrence
- Topeka
- Manhattan
- Salina
- Wichita

Additionally, as outlined in Appendix O, Electrify Heartland has created an EV Ready Communities award, to help cities identify and implement best practices to support electric vehicles and related infrastructure.

Similar to Leadership in Energy and Environmental Design (LEED) Certification, EV Ready Communities uses a series of criteria that municipalities can use to earn a one-, two-, or three-star designation, based on the number of criteria met.

8.9 Develop requirements for Website with benefits, EVSE locations and EV options, webinar promotion

Electrify Heartland has created a comprehensive website, www.ElectrifyHeartland.org, to provide the public with news and information on all aspects of EV and EVSE development in the planning region.

The steering committee developed a flowchart and built the website using a Wordpress platform, enabling any member of the team to add pages and/or update content with minimal programming or training.

As of this writing, the website contains the following elements:

- About EVs (including vehicle descriptions, a glossary of terms and the Department of Energy's electric vehicle consumer handbook in downloadable PDF form)
- Event Calendar
- Links to other helpful online resources

- News releases, photos and videos
- Planning maps
- "Where is EVSE?" contest page (as outlined in this section)
- Password-protected Workspace page, where Steering Committee members can share and access planning documents and other resources

Additionally, Electrify Heartland has created social media pages on Facebook and YouTube, and maintains a Twitter account (@ElectrifyHeart) that currently has more than 140 "followers."

8.10 About the Author

Bill Patterson is founder and president of Nation Ranch, a marketing communications company specializing in brand management, public relations and crisis communications. As a member of the Electrify Heartland Steering Committee, Mr. Patterson helped create public communications and outreach materials to educate civic and business leaders and the community at large on the positive economic and environmental impact the electric vehicle and related industries have in the region. A native Kansas Citian, Mr. Patterson has more than 20 years' experience in marketing communications, representing a variety of industries including aviation, hospitality and tourism, financial services and economic development. He holds a Bachelor of Science Degree from Boston University.

Kansas City Regional Clean Cities Coalition Administered by Metropolitan Energy Center, the coalition is a public-private partnership among fleet managers and manufacturers, vendors and service providers in the alternative fuels and vehicle industries. It works in communities across Kansas and in western Missouri. Kansas City's coalition is a partner since 1998 with the U.S. Department of Energy's Clean Cities Program, whose mission is to advance the energy, economic, and environmental security of the United States by supporting local actions to reduce petroleum use in transportation. The coalition administers more than $40 million in clean transportation projects in Kansas, Missouri, Iowa and Nebraska. For more information visit www.metroenergy.org/kccleancities.aspx.About

Metropolitan Energy Center is a nonprofit organization with a threefold mission to create resource efficiency, environmental health, and economic vitality in the Kansas City region. Over the past three decades, MEC has grown to be a recognized catalyst for regional energy partnerships that satisfy the triple-bottom-line approach. Founded in 1980, MEC is a catalyst for community partnerships focused on energy conservation. It works through a variety of educational and training programs, including Kansas City Regional Clean Cities Coalition, Home Performance, Project Living Proof and EnergyWorks KC. Every energy dollar conserved through MEC's work remains available for investment in the local economy.

MEC was awarded more than $17 million in federal funding for transportation projects in recent years and is a partner in other multi-million-dollar projects in Kansas and Missouri. MEC has been the recipient of many awards recognizing its contribution to energy conservation and was host of the national Affordable Comfort Conference in 2003 and 2009