

***City of KCMO
Vulcan Smart City Challenge Proposal
May 2016***



Scope of Work: Transform transportation systems & minimize greenhouse gasses

- Construction of an Electric Bus Rapid Transit line
- Installation of Electric Vehicle and Connected Vehicle infrastructure that includes the airport and various neighborhoods. Includes a freight component that features electric trucks, electric busses and charging infrastructure.
- Connected and Empowered Communities:
 - Project links current and future initiatives
 - Research (local universities)
 - Public outreach and education
 - Single payer interface with access to busses, B-cycle sharing, Zip Car and other options

Objectives & Measures of Performance

Objective	Measure	Collection Measure
Improve public health	Air quality sensors (Nox, Sox, CO, gl O3)	Air quality monitoring stations
Reduce GHG	<ol style="list-style-type: none"> 1. Vehicle idle time at traffic lights 2. Carbon intensity of the grid 	<ol style="list-style-type: none"> 1. Traffic monitoring <i>dashboard/metrics</i> 2. KCP&L reporting
Incentivizing EV usage	<ol style="list-style-type: none"> 1. Number of fleet EVs and emission reduction 2. Number of EV charging stations 3. Number of EV dealerships 4. Consumer acceptance of EVs 	<ol style="list-style-type: none"> 1. Partnership reporting, equivalent GHG calculation 2. KCP&L reporting 3. KCRC3 reporting 4. Surveys, social media
Decrease POV usage, Increase Public Transportation usage	<ol style="list-style-type: none"> 1. Number of Public transportation ridership 2. Number of Bike commuters in Metro area 	<ol style="list-style-type: none"> 1. KCATA tracking data 2. Traffic Monitoring <i>dashboard/metrics</i>, self-reporting initiative

Partnership with KCP&L



A DECADE OF KCP&L'S
SUSTAINABILITY
EFFORTS

KCP&L believes in providing cleaner, more sustainable energy to customers. Since 2005, we have saved nearly 200 megawatts through energy-efficiency initiatives, enough to meet the demand of 38,000 homes.



Aug. 2005

Fourteen Comprehensive Energy Plan Pilot Programs are offered to customers, making KCP&L the first utility in Missouri or Kansas to make a strong commitment to energy efficiency.

Oct. 2006

Spearville Wind Generation Facility, the first Kansas wind facility constructed and owned by an investor-owned utility, becomes operational. The facility now produces 148.5 MW of electricity.



July 2009

The Missouri Energy Efficiency Investment Act (MEEIA) is signed into law. KCP&L leads efforts to advocate its passage.

Nov. 2010

KCP&L begins a pilot to test 44 LED streetlights, providing additional energy efficiency through lighting in local communities.



Aug. 2011

Iatan 2, one of the cleanest, most efficient coal power plants in the country, wins Power Plant of the Year Award from *POWER* magazine.

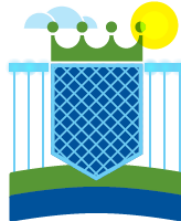
Sept. 2011

Construction begins on environmental upgrades at the La Cygne power plant, significantly reducing emissions on the 1,400 MW of electricity produced.



Dec. 2011

KCP&L is the first utility to file under MEEIA. Fifteen energy-efficiency programs are offered to KCP&L's Missouri customers.



Jan. 2012

KCP&L and the Kansas City Royals partner to install the largest in-stadium solar array in Major League Baseball at Kauffman Stadium.

Jan. 2014

KCP&L files for expansion of MEEIA programs to all KCP&L Missouri customers, and announces the purchase of 400 MW of wind power in Kansas and Missouri.

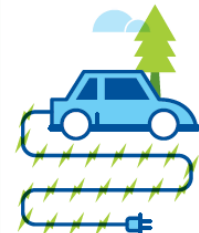


April 2014

The Kansas Energy Efficiency Investment Act (KEEIA) is signed into law. KCP&L leads efforts to advocate its passage.

Jan. 2015

KCP&L announces plan to stop burning coal at three power plants.



Jan. 2015

KCP&L introduces the more than 1,000 unit KCP&L Clean Charge Network that will be installed across our service region.

510-15-3728 08/15