

# Energy Innovation Corridor

## Estimated CO2 and Economic Impacts

### Year 1 (January 1, 2010 - June 30, 2011)

	Year 1				Carbon			Cost			Trade			Total Economic Impact
	Goal	lbs	Unit	Carbon lbs	Savings	Unit	Cost Savings	Impact	Unit	Trade Impact	Unit	Trade Impact		
Electric Conservation kWh	45,155,620	x	1.2751 kWh	=	57,577,931	\$0.070 kWh	=	\$ 3,160,893					\$ 3,160,893	
Gas Conservation Therms	686,850	x	11.66 therm	=	8,008,671	\$0.500 therm	=	\$ 343,425					\$ 343,425	
Solar kWh	500,000	x	1.2751 kWh	=	637,550				\$0.020 kWh	=	\$ 10,000		\$ 10,000	
Biomass kWh	160,000,000	x	1.2751 kWh	=	204,016,000				\$0.020 kWh	=	\$ 3,200,000		\$ 3,200,000	
Windsource kWh	4,715,000	x	1.2751 kWh	=	6,012,097				\$0.020 kWh	=	\$ 94,300		\$ 94,300	
Smart Grid Capacitor kWh	200,000	x	1.2751 kWh	=	255,020				\$0.020 kWh	=	\$ 4,000		\$ 4,000	
Electric Vehicle Impact #	12	x	15,000 vehicle	=	180,000				\$1,500 vehicle	=	\$ 18,000		\$ 18,000	
<b>Total</b>					276,687,269			\$3,504,318			\$3,326,300		\$ 6,830,618	

### Year 2 (July 1, 2011 - June 30, 2012)

	Year 2				Carbon			Cost			Trade			Total Economic Impact
	Goal	lbs	Unit	Carbon lbs	Savings	Unit	Cost Savings	Impact	Unit	Trade Impact	Unit	Trade Impact		
Electric Conservation kWh	30,103,747	x	1.2751 kWh	=	38,385,288	\$0.070 /kwh	=	\$ 2,107,262					\$ 2,107,262	
Gas Conservation Therms	457,900	x	11.66 therm	=	5,339,114	\$0.500 /therm	=	\$ 228,950					\$ 228,950	
Solar kWh	1,400,000	x	1.2751 kWh	=	1,785,140				\$0.020 kWh	=	\$ 28,000		\$ 28,000	
Smart Grid Capacitors	1,000,000	x	1.2751 kWh	=	1,275,100				\$0.020 kWh	=	\$ 20,000		\$ 20,000	
Biomass kWh	745,939,500	x	1.2751 kWh	=	951,147,456				\$0.020 kWh	=	\$ 14,918,790		\$ 14,918,790	
Windsource kWh	4,715,000	x	1.2751 kWh	=	6,012,097				\$0.020 kWh	=	\$ 94,300		\$ 94,300	
Electric Vehicle Impact #	6	x	15,000 vehicle	=	90,000				\$1,500 vehicle	=	\$ 9,000		\$ 9,000	
<b>Total</b>					1,004,034,195			\$2,336,212			\$15,070,090		\$ 17,406,302	

### Year 1 & 2 (January 1, 2010 - June 20, 2012)

	January 2010 - June 30, 2012				Carbon			Cost			Trade			Total Economic Impact
	Goal	lbs	Unit	Carbon lbs	Savings	Unit	Cost Savings	Impact	Unit	Trade Impact	Unit	Trade Impact		
Electric Conservation kWh	75,259,367	x	1.2751 kWh	=	95,963,219	\$0.070 /kwh	=	\$ 5,268,156					\$ 5,268,156	
Gas Conservation Therms	1,144,750	x	11.66 therm	=	13,347,785	\$0.500 /therm	=	\$ 572,375					\$ 572,375	
Solar kWh	1,900,000	x	1.2751 kWh	=	2,422,690				\$0.020 kWh	=	\$ 38,000		\$ 38,000	
Smart Grid Capacitors	161,000,000	x	1.2751 kWh	=	205,291,100				\$0.020 kWh	=	\$ 3,220,000		\$ 3,220,000	
Biomass kWh	750,654,500	x	1.2751 kWh	=	957,159,553				\$0.020 kWh	=	\$ 15,013,090		\$ 15,013,090	
Windsource kWh	4,915,000	x	1.2751 kWh	=	6,267,117				\$0.020 kWh	=	\$ 98,300		\$ 98,300	
Electric Vehicle Impact #	18	x	15,000 vehicle	=	270,000				\$1,500 vehicle	=	\$ 27,000		\$ 27,000	
<b>Total</b>					1,280,721,463			\$5,840,531			\$18,396,390		\$ 24,236,921	

#### Assumptions:

Electric Vehicle Impact is calculated @ 15,000 miles/yr / 25 miles per gallon x \$2.50/gallon.

Biomass converted from pounds of steam to therms using a multiplier of 1,194 from ENERGY STAR.

Cost Savings for conservation calculated using our lowest, non-residential Xcel Energy customer rates.

Trade Impact calculated using a conservative estimate from Xcel Energy fuel supply on the variable cost of generation and the avoided incremental cost of fuel.