



Clean Energy Partnership First Annual Report June 6, 2016

Clean Energy Partnership History

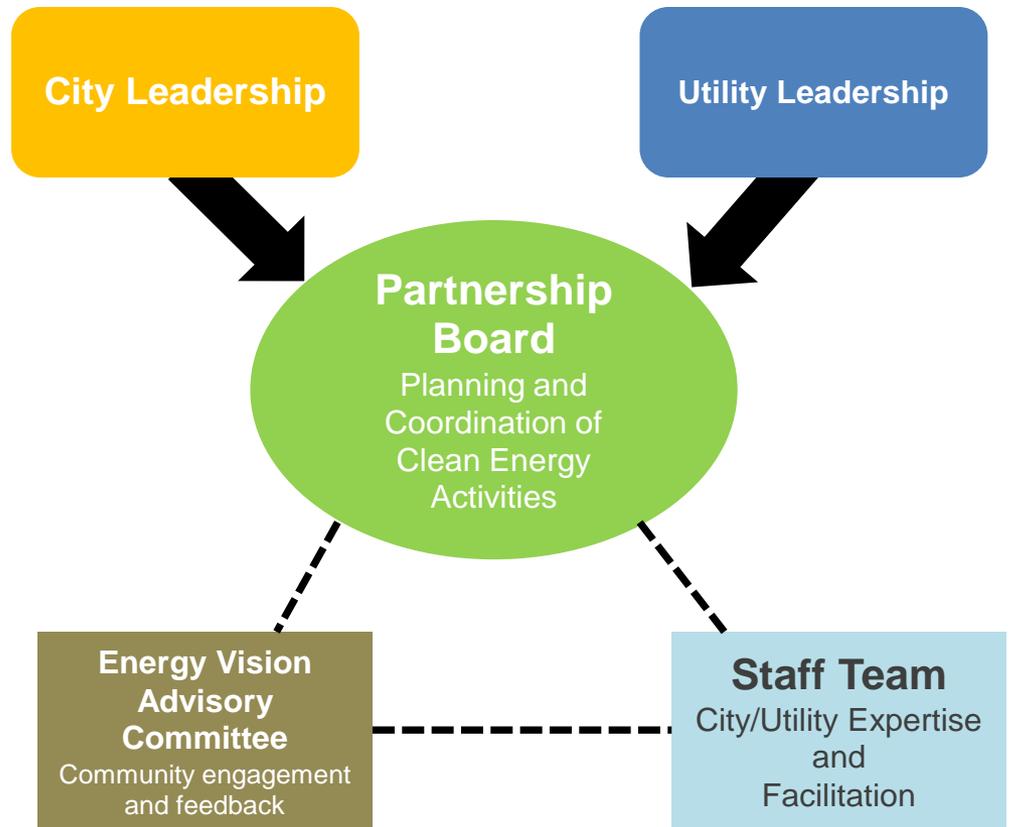


- Early 2014 Energy Pathways Study completed which detailed the City's vision for a sustainable, 21st century energy system.
- October 2014 Based on the study, Council directed staff to work with utilities to implement a Clean Energy Partnership Board to help the City reach its Climate Action Plan and Energy Vision for 2040 goals.
- January 2015 Minneapolis Clean Energy Partnership launched with the ultimate target of 80% greenhouse gas emission reductions by 2050.

Partnership Structure

Board:

- Mayor Hodges
- CMs: Glidden, Reich with Gordon as alternate
- Spencer Cronk
- Xcel Energy: Laura McCarten, Lee Gabler
- CenterPoint Energy: Jeff Daugherty, Brad Tutunjian



Partnership Structure Con't

- CEP Board meets quarterly
- Partnership work is by a two-year work plan adopted by the Board
- Energy Vision Advisory Committee provides feedback on the work plan and performance metrics
- Staff teams (utility and city) support the Board and drive implementation of work plan items
- Annual reports allow partners and the public to measure progress

Energy Vision Advisory Committee (EVAC) Charge

- Review and provide feedback on the CEP work plan, as well as performance reports.
- Serve as a critical communication link to share information about CEP and EVAC decisions and activities to their respective constituencies.

2015-2016 EVAC Members

Jamez Staples & William Weber, Co-Chairs

Ross Abbey

Louis Alemayehu

Cameron Bailey

Trevor Drake

Chris Duffrin

John Farrell

Janne Filsrand

Timothy Goetz

Sydney Jordan

Matt Kazinka

Kevin Lewis

Annie Levenson Falk

Karen Monehan

Julia Silvis

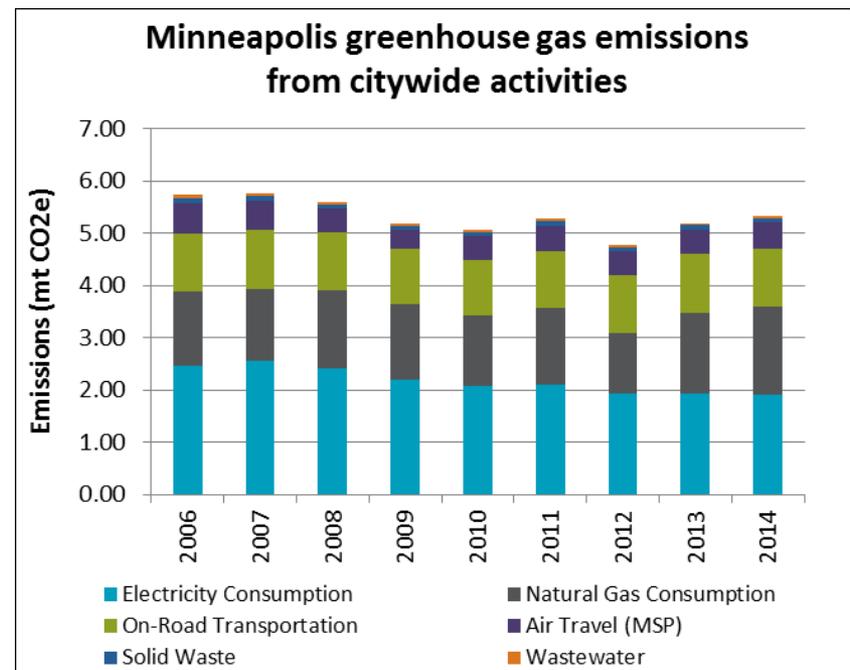
Kirk Washington

Minneapolis Clean Energy Partnership 2015 Annual Report



Executive Summary

- Annual Report of the City's greenhouse gas profile related to buildings and energy production, consumption, and savings opportunities.
- From 2006 levels:
 - 2014 city wide GHG emissions are ↓ 7.5%
 - Electricity emissions ↓ 22.5%
- Benchmarking ordinance & Xcel Energy online tool
- Almost \$2M spent on EE for Low Income customers (Fed & CIP)
- CNP Air-Sealing & Insulation pilot
- Multi-Family program
- Solar interconnections ↑ 40% from 2014

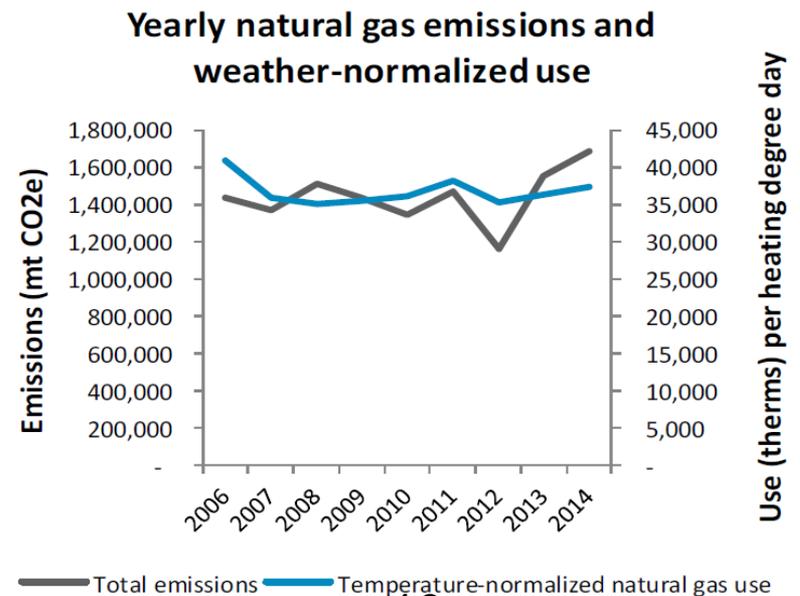
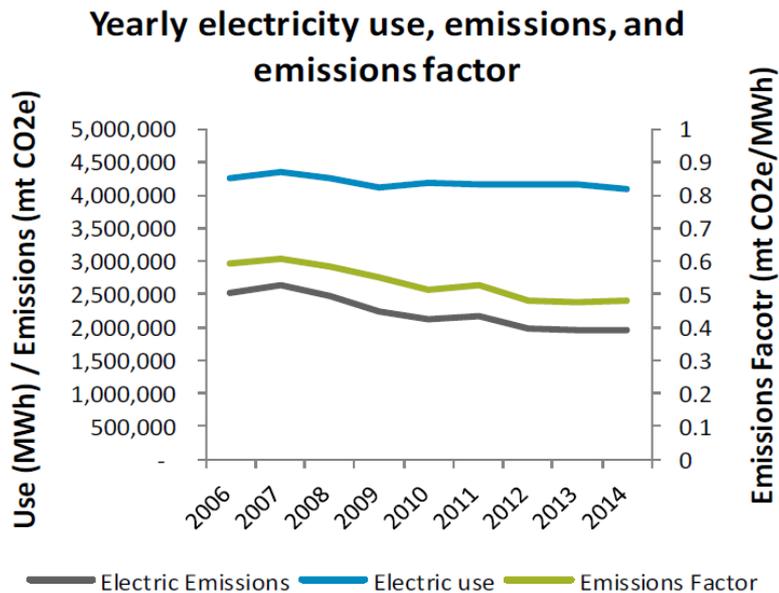


Clean Energy Partnership Metrics

	Metric	Unit(s)	Geography
1	Citywide GHG emissions	metric tons of CO ₂ e	citywide
1.1	GHG emissions from electricity use	metric tons of CO ₂ e	citywide
1.2	GHG emissions from natural gas use	metric tons of CO ₂ e	citywide
2	Commercial building energy use	kWh, therms	citywide
2.1	Commercial building benchmarking results	Average ENERGY STAR score, Average EUI, Total EUI	buildings covered by ordinance
2.2	Commercial utility EE program utilization	Participation, incentive dollars, estimated energy savings, estimated cost savings	citywide
3	Residential building energy use	kWh, therms	citywide
4	Local or directly purchase renewable energy	mWhs	census tract
4.1	WindSource customers	count of customers, mWhs	census tract
4.2	Community solar garden subscribers	count of customers, mWhs	census tract
4.3	Rooftop solar	Count of interconnections, MWs, mWhs	census tract
5	Home Energy Squad visits	count of HES visits (rental and owner-occupied), estimated energy savings, estimated cost savings	census tract
5.1	Percent of eligible properties served by HES	percentage of eligible properties	census tract
5.2	HES-driven loans	count of loans, loan value	census tract
6	Low-income visits	count of CIP low income and WAP visits, estimated energy savings, estimated cost savings	census tract
7	Air sealing/insulation (ASI)	participation, estimated energy savings, estimated cost savings	census tract
8	Multi-family program participation	count of visits, count of dwelling units served, estimated energy savings, estimated cost savings	census tract
8.1	Percent of eligible MF properties served by MFBE	percentage of eligible properties	census tract
8.2	Percent of properties participating in MFBE that engaged in activity beyond audit & direct install (conversion rate)	Percent of properties	census tract

Metric 1: Citywide Greenhouse Gas Emissions

	Metric	2014
1.0	Citywide emissions (metric tons CO ₂ e)	5,299,258
1.1	Emissions from electricity use (metric tons CO ₂ e)	1,904,136
1.2	Emissions from natural gas use (metric tons CO ₂ e)	1,691,579



Metric 2.0-2.1: Commercial Building Energy Use

	Metric	2014
2.0	Commercial/Industrial building electricity use (MWh)	3,088,342
	Commercial building natural gas use (therms)	158,655,415
2.1	Average ENERGY STAR score of benchmarked buildings	74
	Average EUI of benchmarked buildings (kBtu/ft ² /yr)	99
	Total site energy use of benchmarked buildings (kBtu)	8,176,575,652

Metric 2.2: Commercial Utility EE Program Utilization

	Metric	2014	2015
2.2	Commercial utility energy efficiency program participation	CNP: 1,096 rebates; 311 customers XE: 668 rebates; 653 customers	CNP: 1,219 rebates; 473 customers XE: 1,249 rebates; 757 customers
	Incentive dollars	CNP: \$809,865 XE: \$3,134,393	CNP: \$720,490 XE: \$4,235,490
	Estimated energy savings	CNP: 4,343,071 therms XE: 36,160,509 kWh	CNP: 2,668,485 therms XE: 43,204,422 kWh
	Estimated cost savings	CNP: \$2,844,873 XE: \$1,952,667	CNP: \$1,280,162 XE: \$4,622,873

Metric 3: Residential Building Energy Use

	Metric	2014	2015
3.0	Total electric use by residential customers (kwh)	980,965,000	945,334,750
	Total natural gas use by residential customers (therms)	130,883,472	102,326,656

	Total Customers	Avg Annual Usage	Avg Monthly Usage
Gas	120,000	950 therms	79 therms
Electric	174,000	5,624 kWh	469 kWh* Average in MN service territory is 650 kWh, Mpls smaller due to high rental population and efficiency

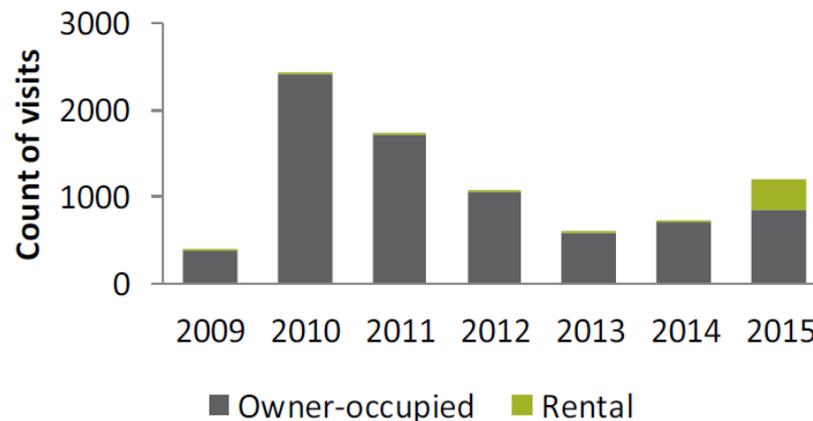
Metric 4: Locally or Directly Purchased Renewable Energy

	Metric	MWh	Customers
4.1	Windsorce (Cumulative 2012-2015)	MWhs: 115,435,930	Customers: 13,286
	Metric	2014	2015
4.2	Community Solar Gardens Customers, MWhs	0	0
4.3	Rooftop New Solar Interconnections, MW, MWhs*	Inter: 56 MW: 0.75 MWhs: 930	Inter: 92 MW: 0.92 MWhs: 1050

Metric 5: Home Energy Squad Participation

	Metric	2014	2015
5.0	Home Energy Squad participation count (rental & owner-occupied)	731	1,198
	Estimated annual energy savings (kBtu)	6,605,790	10,825,904
	Estimated annual cost savings	\$99,031	\$136,161
5.1	Percent of 1-4 unit residences served by HES	0.8%	1.0%
5.2	Energy efficiency loan count	11	47
	Total value of loans	\$72,519	\$279,882

Count of HES visit by year and type*



*Incl. similar program, Community Energy Services, 2009-2013 15

Metric 6:

Low-Income Program Participation

	Metric	2015
6	Number of low-income visits	CNP: 583 participants XE: 661 participants
	CIP low-income dollars spent	CNP: \$921,832 XE: \$324,360
	Number of Weatherization Assistance Program (WAP) visits	168 participants
	WAP dollars spent	\$916,805
	Estimated annual energy savings (CIP only)	CNP: 231,859 therms; XE: 359,233 kWh
	Estimated annual cost savings (CIP only)	CNP: \$122,208; XE: \$32,331

Metric 7: Air-Sealing and Insulation Program Participation

	Metric	2015
7.0	Count of participating customers	335
7.1	Estimated energy savings (therms)	74,741
7.2	Total estimated cost savings	\$42,069

Metric 8: Multi-Family Program Participation in CIP

	Metric	2015
8.0	Multifamily program participation* (count of visits)	CNP: 136 MF buildings XE: 623 customers
	Estimated energy savings	CNP: 709,335 therms XE: 3,282,658 kWh
	Estimated cost savings	CNP: \$364,661 XE: \$294,576
	Rebate dollars spent	CNP: \$245,840 XE: \$468,587

Next Steps

- Identify areas to target for specific engagement initiatives.
- Use Findings to inform Partnership's 2017-2018 Work Plan
- Seek additional resources and strengthen relationships with other potential funders.

Questions?