



# Clean Energy Partnership Q3 Board Meeting July 25, 2017



# Agenda

**11:30** Welcome & Introductions

**11:35** Review and Approval of Agenda and Minutes

**11:40** 2016 Annual Report Presentation

**12:00** Quarterly Update from EVAC Co-Chairs

**12:15** Partnership Funding Discussion

- EVAC Funding Work Group Presentation
- Board Discussion and Motion

**12:55** Announcements / Open Discussion

**1:30** Adjourn



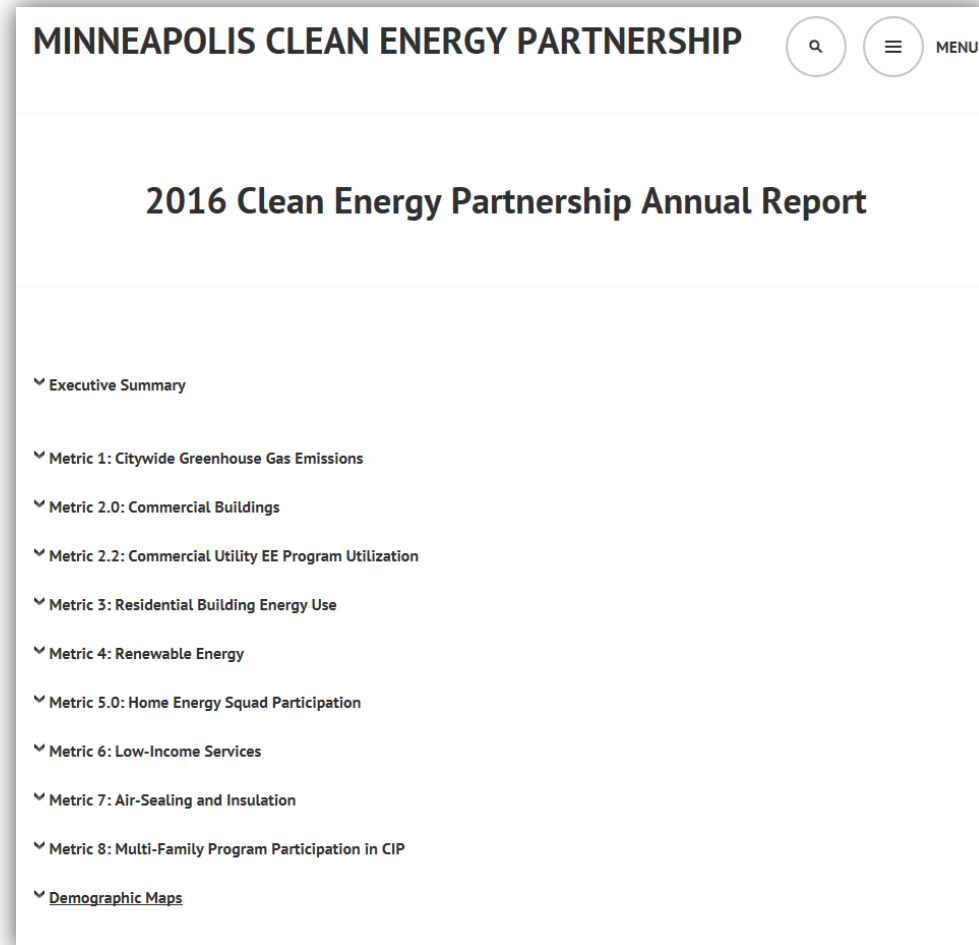
# 2016 Annual Report Presentation

## Report is now web-based

- More accessible, increases usability, reduces printing, and is easier to update
- Links to programs and resources in report

## Eight sections (metrics)

- Identified by the Board as critical areas of measurement in tracking progress toward Partnership goals.





## 2016 Annual Report Highlights

### **City of Minneapolis**

- 17.4% decrease in GHG emissions since 2006, meeting 2015 goal!
- Piloted Green Business Cost Share Program pilot leveraged \$43k for \$400k in EE work, reducing 2.6 million lbs of CO<sub>2</sub>

### **Xcel Energy; Energy Efficiency Programs**

- \$15.7M in program investment in Minneapolis
- 7,600 participants, 78,008,624 kWh saved
- \$7.8M annual customer bill savings

### **CenterPoint Energy; Energy Efficiency Programs**

- \$7M in program investment in Minneapolis
- 30,000 participants, 627,350 dekatherms saved
- \$2.8M annual customer bill savings



## Metric 1: Citywide Greenhouse Gas Emissions

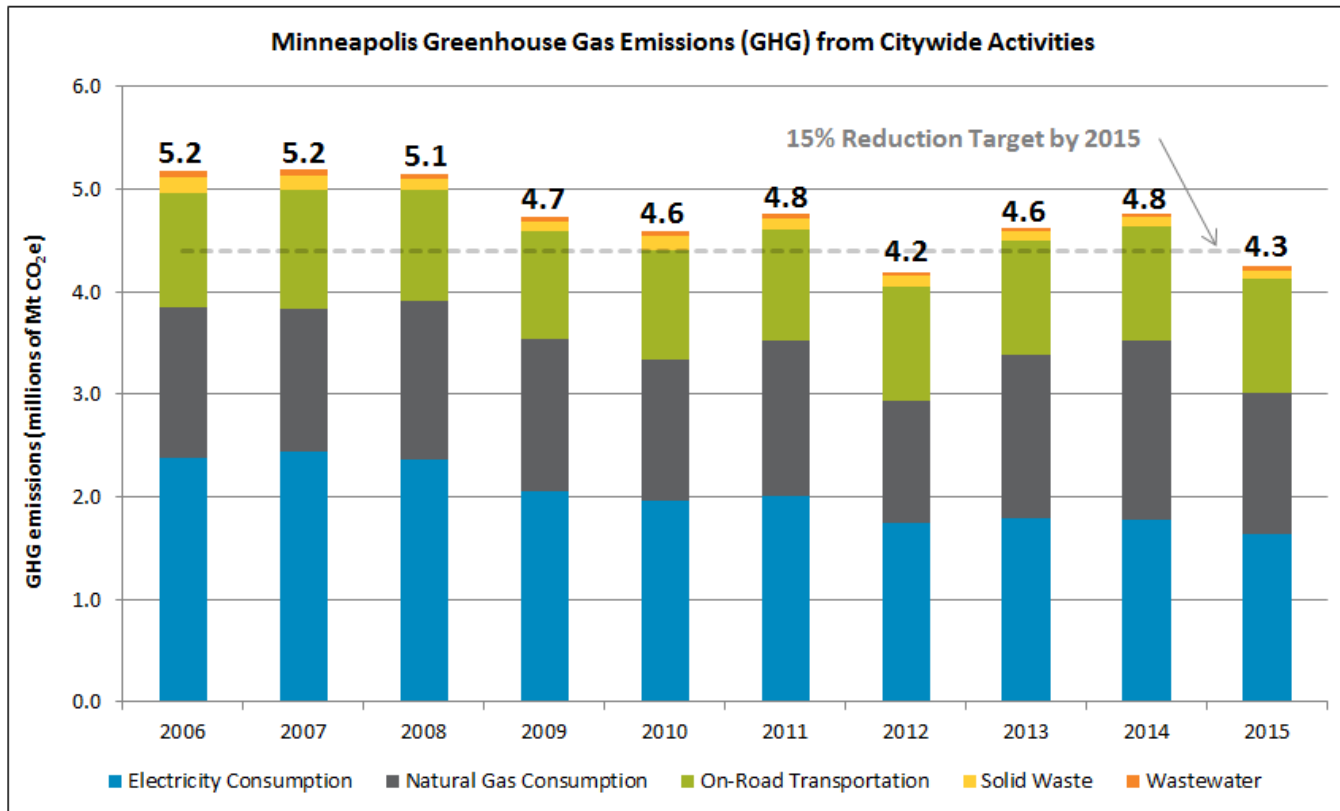
Metric		2014	2015
1.0	Citywide emissions (metric tons CO <sub>2</sub> e)	4,758,487	4,250,783
1.1	Emissions from electricity use (metric tons CO <sub>2</sub> e)	1,783,580	1,630,318
1.2	Emissions from natural gas use (metric tons CO <sub>2</sub> e)	1,733,068	1,382,583

Both natural gas and electricity consumption and emissions decreased.

- Winter months of 2015 were warmer than in 2014.
- Despite summer of 2015 being slightly warmer than 2014.

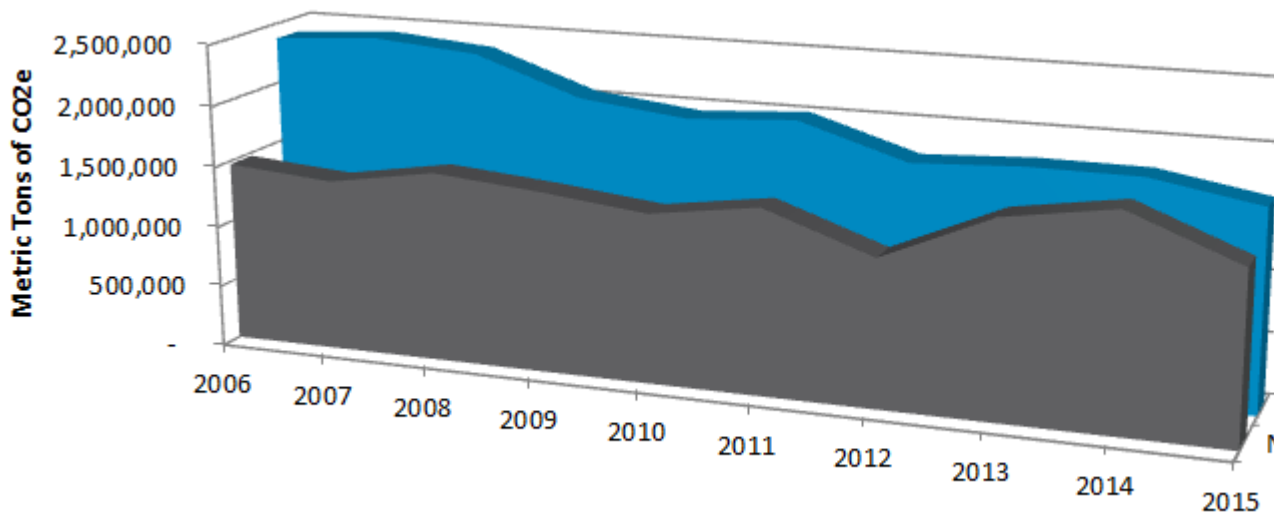
# Metric 1: Citywide Greenhouse Gas Emissions

Decreased 17.8% in 2015 compared to the 2006 baseline, exceeding reduction goal of 15% by 2015.

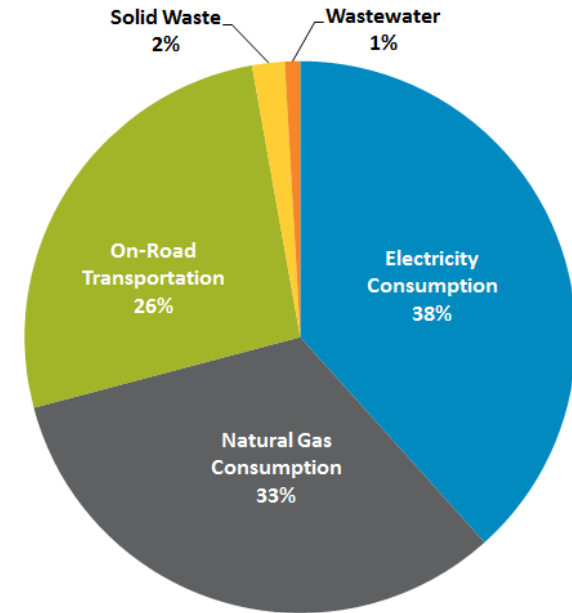


# Metric 1: Citywide Greenhouse Gas Emissions

Emissions from electricity are the largest share; expected to be eclipsed by natural gas in the coming years.



Minneapolis Greenhouse Gas Emissions by Citywide Activities (2015)



Electricity Consumption  
Natural Gas Consumption





## Metrics 2.0 & 2.1: Commercial Buildings

Metric		2014	2015	2016
2.0	Commercial/Industrial building electricity use (MWh)	3,088,342	3,033,427	3,028,857
	Commercial building natural gas use (therms)	158,655,415	135,217,985	126,892,599
2.1	Average ENERGY STAR score of benchmarked buildings	74	71	Not yet available
	Average EUI of benchmarked buildings (kBtu/sqft/yr)	101	95	Not yet available
	Average weather-normalized EUI of benchmarked buildings (kBtu/sqft/yr)	95	99	Not yet available
	Total site energy use of benchmarked buildings (kBtu)	8,176,575,652	8,104,028,664	Not yet available

- Electricity consumption decreased 0.2% and natural gas consumption decreased 6.2%.
- 417 properties benchmarked in 2015 data.
  - Decreased average building energy use intensity (EUI), increased when accounting for weather.
- More data, explanation, and programs in [2015 Energy Benchmarking Report](#).



## Metric 2.2: Commercial Utility EE Program Utilization

Metric		2014		2015		2016	
		Xcel Energy	CenterPoint Energy	Xcel Energy	CenterPoint Energy	Xcel Energy	CenterPoint Energy
2.2	Commercial utility energy efficiency program participation (customers)	653	311	757	473	918	399
	Commercial utility energy efficiency program participation (rebates)	688	1,096	1,249	1,219	1,758	1,063
	Rebate dollars spent	\$3,134,939	\$809,865	\$4,235,490	\$720,490	\$8,862,846	\$1,135,910
	Estimated annual energy savings	36,160,509 kWh	4,343,071 therms	43,204,422 kWh	2,668,485 therms	75,369,492 kWh	5,218,578 therms
	Estimated annual cost savings	\$1,952,667	\$2,844,873	\$4,622,873	\$1,280,162	\$7,536,949	\$2,811,119

- Cost savings increased by \$4.45M from 2015-16, \$10.35M total
- EDA saw a 154% increase in kWh saved and a 372% increase in Therms saved
- Rebate dollars increased 100% from 2015-16

Energy Design Assistance	2015		2016	
	Xcel Energy	CenterPoint Energy	Xcel Energy	CenterPoint Energy
Participants	24	11	31	25
Energy Savings	5,847,225 kWh	400,317 therms	14,902,577 kWh	1,890,915 therms
Rebates	\$592,603	\$140,596	\$2,139,146	\$302,767



## Metric 3: Residential Building Energy Use

Metric		2014	2015	2016
3.0	Total electric use by residential customers (kWh)	980,965,000	945,334,750	970,280,366
	Total natural gas use by residential customers (therms)	130,883,472	102,326,656	94,204,489

### Residential Electric

- Use increased by 2.6% in 2016
- 2.2% increase in customers
- Energy efficiency programs

### Residential Natural Gas

- Use dropped 7.9% in 2016
- Warmer than average year\*
- Energy efficiency programs

\*12% warmer than the 10 year normal



## Metric 4: Renewable Energy

Metric		2014	2015	2016
4.1	Windsorce Customers	9,906	11,154	11,926
	Windsorce MWs	45,534 MWs	33,309 MWs	36,125 MWs
4.2	Solar*Rewards Community MW	-	-	3
	Solar*Rewards Community Gardens			5
4.3	Solar*Rewards <sup>1</sup> Participants	56	92	95
	Solar*Rewards MW	0.75	0.912 MW	1.005 MW
	Solar*Rewards MWs	930	1,050	1,150

<sup>1</sup>Solar Rewards includes both Solar Rewards and Made in Minnesota Participants

- First of the Community Solar Gardens came online in 2016
- Windsorce customers continued to expand, though MWs are down due to specific large customers leaving program
- Solar\*Rewards saw an increase as gardens came online
- The rollout of Renewable\*Connect and more CSG's coming online in 2017 will yield substantial growth in this sector in next years annual report

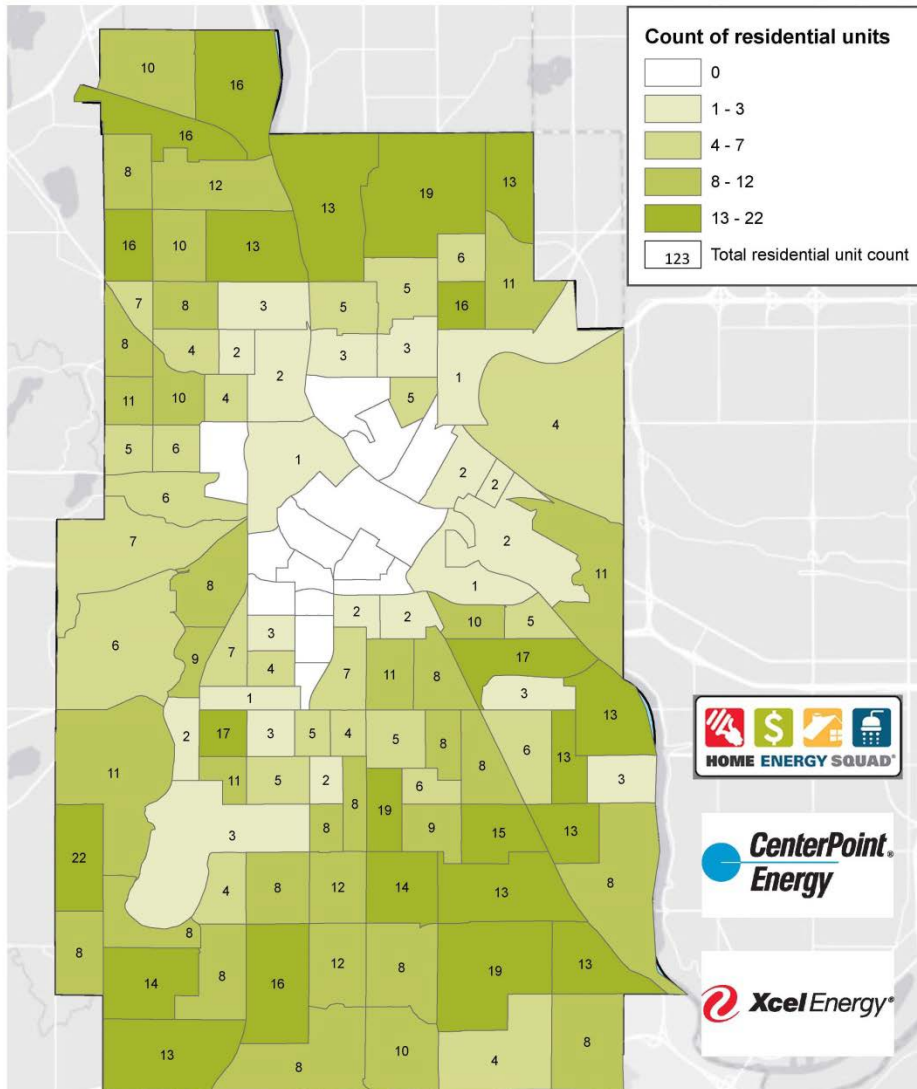


## Metric 5: Home Energy Squad Participation

Metric		2014	2015	2016
5.0	Home Energy Squad participation	731	1,198	837
	Annual energy savings (kBtu)	6,605,790	10,825,904	7,563,674
	Estimated annual cost savings	\$99,031	\$136,161	\$77,354
5.1	Percent of 1-4 unit residences served by HES (incremental)	0.8%	1.0%	0.9%
5.2	Energy efficiency loan count	11	47	43
	Total value of loans	\$72,519	\$279,882	\$192,234

- Participation in the HES decreased from 2015 to 2016, in part due to a decrease in multifamily building participation.
- HES pilot program between CEE and CenterPoint Energy successfully increased implementation of recommended insulation and air sealing home upgrades.
- 32 residents received zero-interest loans for air sealing and insulation upgrades through the City/CEE loan offering.

**Metric 5.0: Home Energy Squad Participation, 2016**



- Metric 5 map shows the distribution of participation in the Home Energy Squad program throughout the City.



## Metric 6: Low-Income Services

Metric		2015		2016	
		Xcel Energy	CenterPoint Energy	Xcel Energy	CenterPoint Energy
6.0	Number of low-income program participants (CIP)	661	583	1,331	453
	CIP low-income dollars spent	\$324,360	\$921,832	\$334,018	\$1,618,735
	Number of Weatherization Assistance Program (WAP) Visits *	168		122	
	WAP dollars spent	\$916,805		\$448,356	
	Estimated annual energy savings (CIP only)	359,233 kWh	231,859 therms	491,532.21 kWh	57,547 therms
	Estimated annual cost savings (CIP only)	\$32,331	\$122,208	\$49,153	\$37,305
6.1	Xcel Energy Power-On Participants	924		2,313	
	Xcel Energy Power-On Total Spent	\$598,752		\$1,887,408	
	Xcel Energy Senior Discount Participants	4,790		4,790	
	Xcel Energy Senior Discount Total Spent	\$862,200		\$1,008,796	
	CenterPoint Energy Bill Pay Assistance Participants	4,000		3,450	
	CenterPoint Energy Bill Pay Assistance Total Spent	\$2,200,000		\$1,178,370	

\*96 of the 122 WAP visits in 2016 were combo LIW/WAP visits

- Low-income utility energy efficiency programs reached 1,784 residents in 2016, saving them over \$86,000 on utility bills.
- Combined, the utilities provided 10,553 Minneapolis customers with \$4,074,574 in bill pay assistance in 2016.



## Metric 7: Air-Sealing and Insulation

Metric		2015	2016
7.0	Count of participating customers	335	277
	Estimated annual energy savings (therms)	74,741	64,404
	Estimated annual cost savings	\$42,069	\$42,292

- CenterPoint Energy's Residential Weatherization project provided rebates for insulation and air sealing in 277 homes, saving those residents about \$42,000 in natural gas heating costs per year.





## Metric 8: Multi-Family Program Participation in CIP

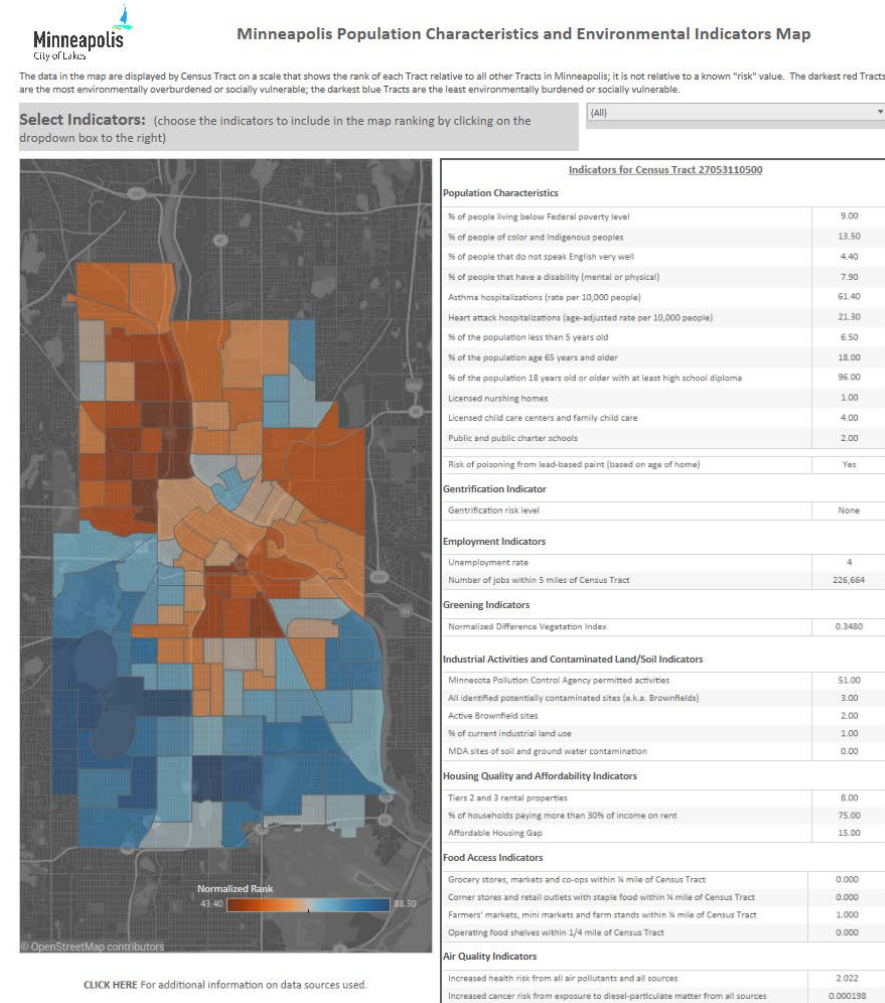
Metric		2015		2016	
		Xcel Energy	CenterPoint Energy	Xcel Energy	CenterPoint Energy
8	Multi-family program participation	623	136	619	90
	Estimated annual energy savings	3,282,658 kWh	709,335 therms	5,422,415 kWh	760,144 therms
	Estimated annual cost savings	\$294,576	\$364,661	\$542,242	\$452,839
	Rebate dollars spent	\$468,587	\$245,840	\$1,649,393	\$302,767

- 2016 was the first full year for the jointly offered Multi-Family Building Efficiency project, which had 29 Minneapolis buildings complete energy audits in 2016.
- Xcel Energy and CenterPoint Energy both saw increased energy savings and rebate spending for multi-family participants in their conservation programs in 2016 compared to 2015.

# Demographic Maps

Demographic and socio-economic maps previously were developed to help EVAC’s Engagement Subcommittee and to ensure Partnership work advances equity.

The City developed an interactive [Minneapolis Population Characteristics and Environmental Indicators Map](#). Map includes all previous indicators as well as new indicators to measure gentrification risk, vegetation levels, industrial activities and contaminated soils, housing quality and affordability, food accessibility, and air quality.





# Quarterly Update from EVAC Co-Chairs



# Partnership Funding Discussion

- **EVAC Funding Work Group Presentation**
  - **Board Discussion and Motion**



## Board Motion in support of increased, dedicated funding for the Partnership:

“The Board has received the report, *Funding the Minneapolis Clean Energy Partnership: Recommendations from the Energy Vision Advisory Committee (EVAC)*. The report states that additional, dedicated, long-term funding is necessary in order to achieve the goals of the Clean Energy Partnership.

Increased utility program funding is possible, subject to State regulatory restrictions; however, utility programs alone cannot be targeted exclusively to Minneapolis residents and businesses or fully meet the greenhouse gas emissions reductions and equity goals of the Clean Energy Partnership.

The Clean Energy Partnership Board supports additional, dedicated City funding for new and existing programs to increase energy efficiency and renewable energy investments with a specific focus on equity and greenhouse gas emissions reductions. “



## **Next Steps for an increase to the franchise fee:**

- **The increase of a franchise fee requires a change in City ordinance**
- **We are looking forward to receiving feedback from the Community Engagement Pilot Project, which will provide valuable findings and recommendations in ways to increase equitable participation in utility energy efficiency programs. In particular, findings will focus on engaging neighborhoods with characteristics that have historically been associated with low participation in energy efficiency programs. We are expecting this report this upcoming winter.**



# Announcements / Open Discussion



## Renewable\*Connect Agreement for City Enterprise

Authorizes a new agreement with Xcel Energy to participate in their Renewable\*Connect Program to purchase up to 17.8 million kWh of renewable electricity annually. Of this total, 14 million kWh will be purchased by the Convention Center and 3.8 million kWh will be purchased by the Water Treatment Plant.

- Additional Staff Direction: Directs Finance & Property Services staff to seek up to an additional 50 million kilowatt hours per year from the Renewable\*Connect Program when sufficient renewable energy is made available for purchase from Xcel Energy.





## Staff Direction Regarding Options for 100% Renewable Sources for City's Electricity Usage

101,000,000 kWh annual electricity consumption for City enterprise (water, buildings, street lights & signals)

- 0.4% is currently renewable (City owns the RECs)

2 phases of Analysis:

- Phase 1 (by Aug 28): Analyze current and project electricity usage over the next 10 years and identify options for obtaining renewable electricity.
- Phase 2 (by Oct 30): Get forecast from Xcel through the Partnership regarding ability to provide renewable resource w/ RECs. Analysis also to include financial, budgetary, climate impacts and considerations.



## Small Business Refrigeration Program Update

- Target Group: Groceries & Convenience Stores
  - Larger groceries added to help with cost effectiveness
  - RFP going out within the next week
  - Filing with Department of Commerce September
  - Roll out, beginning of 2018
  - Leverage with Green Business Cost Share Program
- Met with EVAC SB workgroup twice
  - Discuss details and worked through concerns
  - EVAC SB group supports this project
  - EVAC would like to develop a city wide SB program with contracted
  - community engagement agencies



## **Building Sector Workshop Updates – All Partners**

*2017-2018 Work Plan Items 14 & 15*

### Minneapolis Public Schools

- Held on July 5th

### Office Buildings

- Held on July 11th
- 23 Customers Attended
- Paired benchmarking data with energy efficiency program opportunities

### Hotels

- To be held in August/September



## Low Income Community Solar Garden

- Assessing potential to extend scope of existing RDF-grantee project to include Minneapolis project
- Xcel Energy facilitating discussions with project-grantee and City of Minneapolis



## Xcel Energy's 1,550 MW Wind Addition

- On July 6 the MN Public Utilities Commission approved our plan
- Aim to have all projects operating by end of 2020
  - ✓ Approximately doubles amount of wind on system
  - ✓ Saves customers about \$4 billion over projects' lifetimes
- Expect NSP energy mix will be 2/3 carbon free by 2021



**Next Meeting Date: October 5, 2017**

**Time: 3:30 – 5:30**

**Xcel Energy**

**401 Nicollet Mall**

**Adjourn**