



Consumers Energy Non-wires Alternatives Pilot

The Energy Savers Club



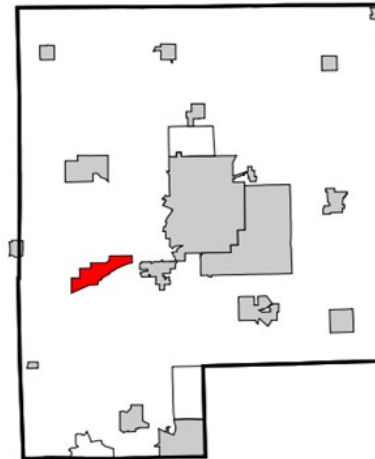
- **Background**

- Initiated in 2015
 - Analysis and Site Selection
 - 2017 Launch

- **Area**

- **Substation**

- 3800 Residential Accounts
 - 6220 avg. kWh/year
 - Slightly below avg. income
- 330 C&I Accounts
 - 37% of total kWh
 - 47,472 avg. kWh/year



Energy Savers Club – Core Components

- **Energy Ambassador**

- Responsible for integrating into Swartz Creek, gathering intelligence, garnering participation through outreach, and providing a line-of-sight to Consumers Energy programs and rebates.

- **Energy Task Force**

- Several local stakeholders, including Consumers Energy Community Affairs and Account Managers serve on the task force.

- **Community Challenge**

- Based on feedback from the Energy Task Force, the Community Challenge served as a means to motivate Swartz Creek residents and businesses to participate in the Pilot.

- **Multi-channel marketing campaign**

- **Unique Brand and Website**

- The website served as the central hub for the Pilot allowing customers to learn about Consumers Energy programs and Community Challenge, and vote for causes that make up the Community Challenge.

List of Measures and Impacts

- **16 Total measures**

- 5 Residential
- 11 Commercial

- **Adoption assumptions**

- Past program participation
- Uplift in participation based on community-based model
- On the ground observations

Commercial				
Measure	Annual kWh Savings	Peak kW Savings	Annual MCF Savings	\$/kW
EMS	213,226	74	7285	167
Efficient Lighting	249,251	54	-	756
Daylighting Sensor	115,657	32	-	1786
Refrigeration	56,255	6	-	473
Window Film	10,261	11	-438	749
Solar PV	21,810	7	-	8,451
Traffic Signals	4,889	2	-	667
Dishwasher	9,322	1	42	2,014
VFD HVAC Fans	8,549	1	-	1,600
Air Conditioning	2,133	1	-4.1	7,882
Battery Storage	-	94	-	2,294

Residential				
Measure	Annual kWh Savings	Peak kW Savings	Annual MCF Savings	\$/kW
Load Switch	-	971	-	57
Refrigerator	312,567	36	-	628
Time-of-Use (TOU)	-	379	-	48
Room Air Conditioning	1,636	2	-	298
Recycling				
AC/Furnace O&M	351	1	50.1	357

Energy Savers Club – Program and Goals

Goal - 2018 1.4MW – 2019: 1.6MW

- **C&I EE**

- Small Bus. Assessment
- Direct Install
- Schools and Municipal
- Bonus Incentives

- **Res. EE**

- Events
- Community Challenge
- Web Site
- Door Hanger
- School Program
- Bonus Incentives

- **Res. DR**

- Bonus Incentives
- Events
- Door Hanger
- Door to Door Campaign

Energy Impacts and Results

The Energy Savers Club encouraged residents and businesses to register for the Energy Savers Club and participate in energy saving programs.

- 694 residents registered for the Club and saved over 2.6 million kWh of electricity.

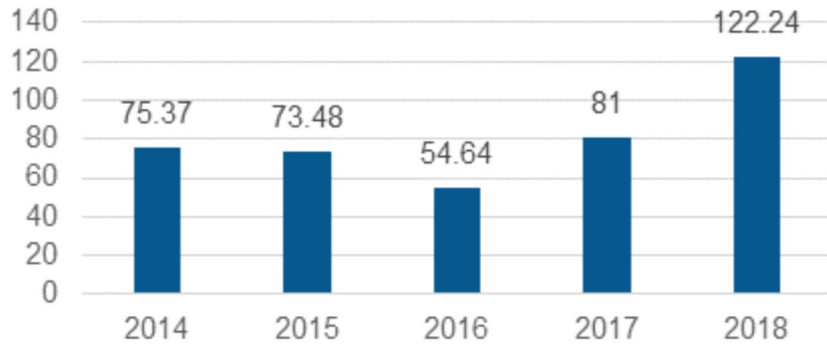
Zip Code	kW Savings
Residential Energy Efficiency	152.84
AC Peak Cycling Savings	455.3
TOU Savings	73.71
C&I Energy Efficiency	113.31
Total Savings	795.16 kW

Substation	kW Savings
Residential Energy Efficiency	70.04
AC Peak Cycling Savings	205.90
TOU Savings	28.35
C&I Energy Efficiency	58.96
Total Savings	363.25 kW

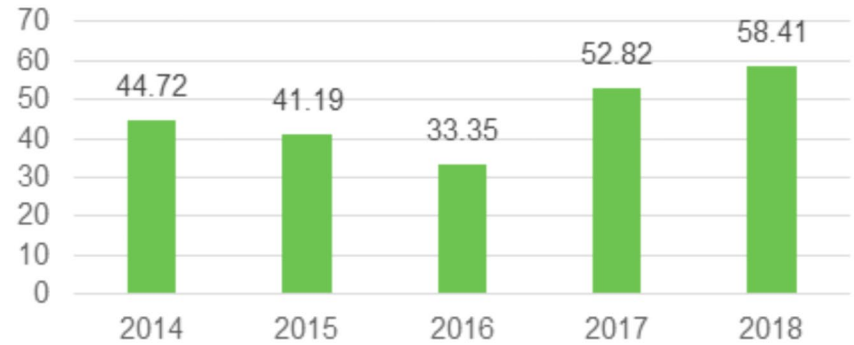
- Additional savings came from DIY kits shipped to registrants that requested a kit.
- Deemed savings from kits were approx. 140kW

Residential Yearly Overview

Energy Savers Club
Residential EE kW Savings
Zip Code

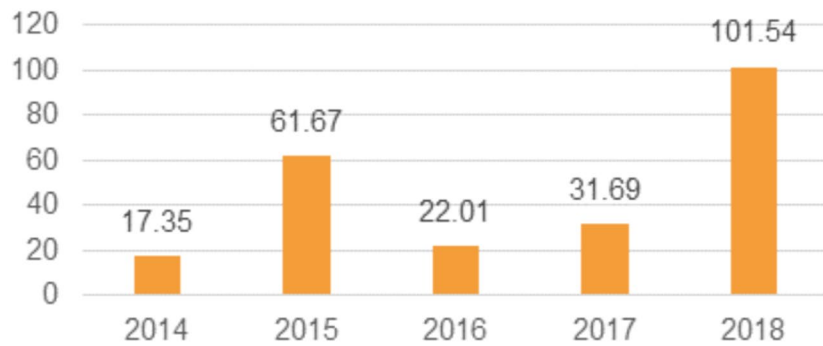


Energy Savers Club
Residential EE kW Savings
Substation

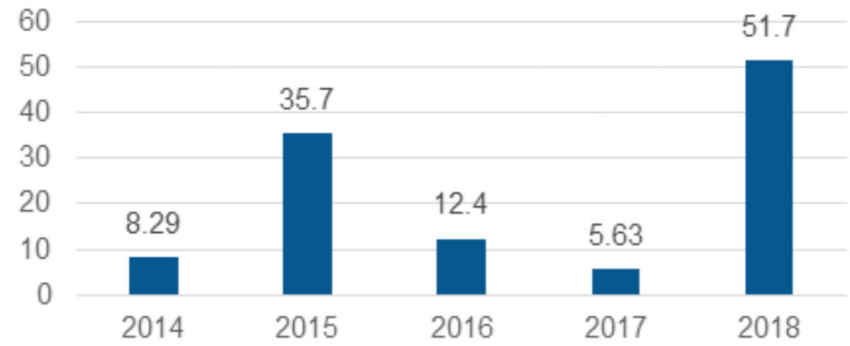


C&I Yearly Overview

Energy Savers Club
C&I EE kW Savings
Zip Code



Energy Savers Club
C&I EE kW Savings
Substation



Lessons Learned

- 1. In-depth field analysis should be cross referenced with DERs analysis**
 - Establish realistic goals, strategies, and tactics
- 2. Enable bonus incentives early on**
- 3. Piloting a non-wires alternative program would benefit from targeting a more diverse community**
 - Range of customers for both residential and C&I
- 4. Use of different marketing tactics for different target markets**
 - Postcards were effective for citizens 45 and over in the Swartz Creek community
 - Participation increased during program hosted events
- 5. Community projects need to have passionate champions**
- 6. Messaging should focus on improvements to indoor comfort and the financial benefits of early upgrades that customers were already considering.**

Lessons Learned – C&I

- 1. Plan outreach campaigns with initial mailer, assessment team and follow-up phone calls from Consumers Energy representative.**
- 2. Use assessment team to educate C&I customers regarding all programs.**
- 3. One-on-one interactions with C&I customers is the best means to increase participation among this segment**
 - Targeting businesses should be highly targeted based on field and data analysis

Next Site - Selection Criteria

- **2015 Criteria for consideration:**
 - Distribution system upgrade driven by load growth
 - Deferrable cost at least \$1 million
 - Need at least two to three years out
- **Second Site Selection Criteria**
 - **Primary**
 - Est. Load Relief (5%-20%)
 - Est. Project Cost (\$1M -\$3M)
 - Project Need Date (3-5 Years)
 - **Secondary**
 - DSCADA (Available)
 - % Res Load (~40% Max)
 - Historical Participation EE / DR
 - DER Potential