

All numbers are preliminary – not final



2017 EWR Plan Highlights

Presentation to the EWR Collaborative

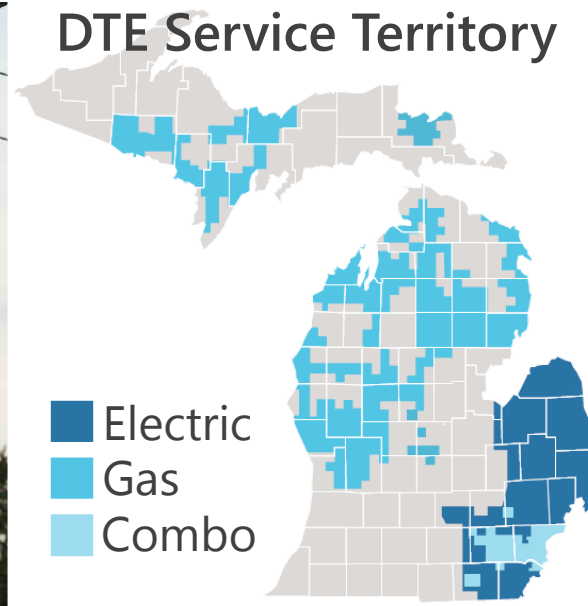
May 15, 2018

- DTE EWR Program History
- 2017 EWR Program Goals
- 2017 EWR Program Results and Highlights
- Challenges and Opportunities

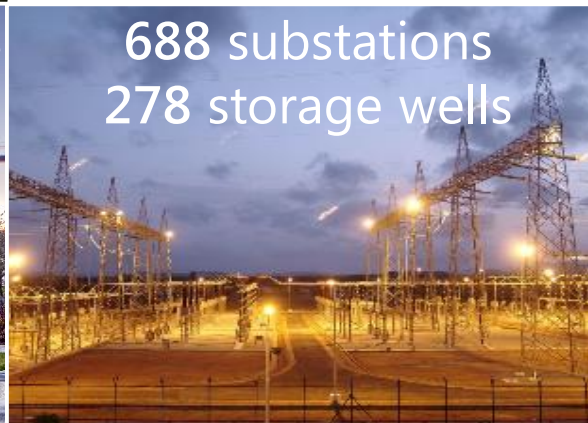
DTE Energy Overview



47,000 MILES
of distribution lines



2.2M electric customers
1.3M gas customers



688 substations
278 storage wells



19,000 MILES
of distribution main

Founded
1886

10,000
employees

DTE effectively helps customers save energy and money by:

- Raising awareness of Energy Waste Reduction
- Developing cost-effective programs, resources and tools
- Making it easy for customers to participate
- Delaying the need for a base load power plant

DTE helps foster a strong regulatory climate and promote environmental and community stewardship by:

- Exceeding Legislative Requirements (PA-342)
- Helping the local economy and creating jobs
- Supporting corporate citizenship and community initiatives

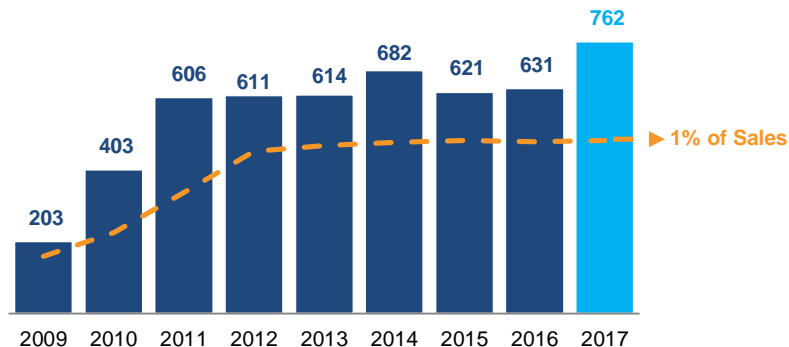
EWR programs promote informed decision making by providing information on energy saving products, services, tools, rebates and strategies. DTE offers 17 residential and C&I programs, ensuring wide and varying participation

RESIDENTIAL PROGRAMS	C&I PROGRAMS	EDUCATION & AWARENESS PROGRAMS	PILOT PROGRAMS
DTE Insight & Energy Bridge*	Prescriptive	Residential	Residential
Appliance Recycling	Non-Prescriptive	Commercial & Industrial	Commercial & Industrial
Multi Family	Self-Direct		Energy Management Tools
Energy Efficient Assistance	Business Energy Consultants		
ENERGY STAR	Retrocomissioning		
HVAC & Water Heating	Mid-Stream Lighting / Cooking		
Audit & Weatherization			
On-Line Energy Audit			
Home Energy Consultation			
Schools			
Home Energy Reports			

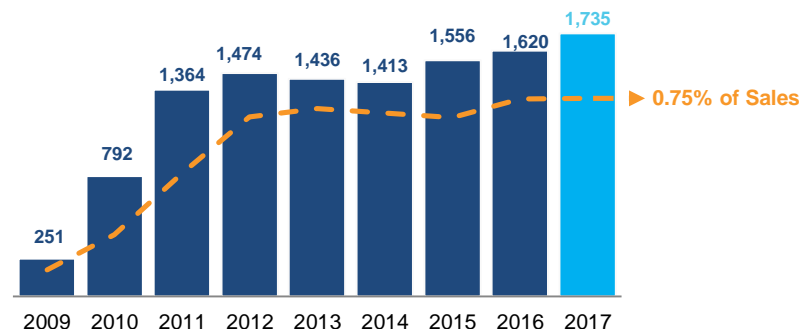
*Includes piloting innovative DSM programs with DTE Insight & Energy Bridge

DTE Energy's EWR programs continue to exceed the legislative savings target while maintaining a cost-effective portfolio

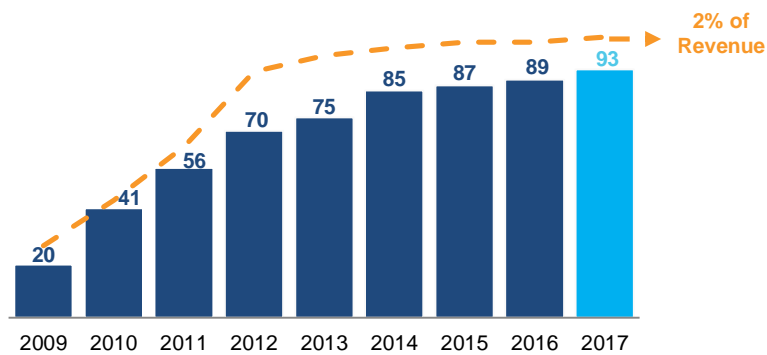
Electric Savings: GWh



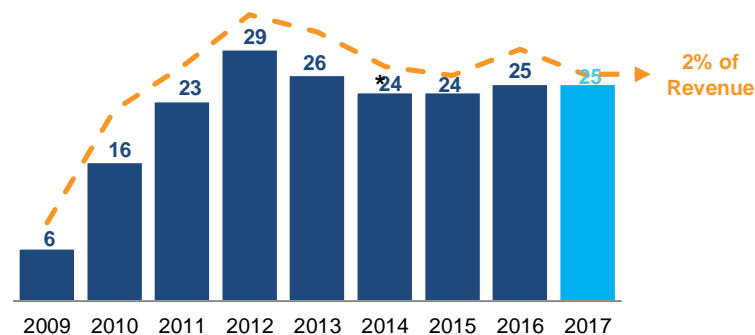
Gas Savings: MMcf



Electric Spend: \$MM



Gas Spend: \$MM



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Agenda

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The overall goal of the 2017 EWR program was to promote participation in EWR programs and maintain the momentum that the EWR program achieved since 2009



DTE Electric:

- Achieve legislated energy savings of 1% of 2016 planned retail sales, or 485 GWh
 - Specifically, the projected savings for 2017, outlined in the approved EWR Plan, was 568 GWh, which would significantly exceed the required minimum savings
 - Spend outlined in the approved 2017 EWR Plan was \$93.2MM
- Meet the minimum required 1 USRCT score of 1.0

DTE Gas:

- Achieve legislated energy savings of 0.75% of 2016 planned retail sales, or 1,305 MMcf
 - Specifically, the projected savings for 2017, outlined in the approved 2017 EWR Plan, was 1,381 MMcf, which would exceed the required minimum savings for the year
 - Spend outlined in the approved 2017 EWR Plan was \$25.4 million
- Meet the minimum required 1 USRCT score of 1.0

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2017 EWR program exceeded the legislative targets within the allocated budget, while maintaining a cost effective portfolio



DTE Electric:

- DTE Electric achieved 762 GWh in verified net energy savings equating to 1.57% of 2016 planned retail sales.
- A USRCT score of 5.44 was achieved based on the 762 GWh verified net energy savings.
- The actual spend was \$93.2 million, a difference of less than 1% from plan

DTE Gas:

- DTE Gas achieved 1735 MMcf in verified net energy savings equating to 1.00% of 2016 planned retail sales.
- A USRCT score of 2.49 was achieved based on the 1,735 MMcf verified net energy savings
- The actual spend was \$25.5 million, a difference of less than 1% from plan

In 2017, the EWR Portfolio resulted in verified net savings of 762 GWh (Electric), 1,735 MMcf (Gas) and 0.108 GW of coincident peak savings

2017 Verified Net Savings for the EWR Portfolio

Savings	2017 Verified Net Savings
Electric Savings (GWh)	762
Gas Savings (MMcf)	1,735
Coincident Peak Demand Savings (GW)*	0.108

** Excludes savings from the Self Direct, Pilots, and Education programs.*

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In 2017, DTE Energy exceeded the maximum performance goal for electric and gas savings



2017 Achievement of Performance Goals

Performance Goal	Minimum Goal	Maximum Goal	Performance	Achieved Minimum?	Achieved Maximum?
Base Electric Savings	485,649 MWh	677,463 MWh	716,408 MWh	✓	✓
Lifetime Electric Savings	4,650,797 MWh	6,490,461 MWh	10,320,091 MWh	✓	✓
Base Gas Savings	1,305,065 MCF	1,668,636 MCF	1,735,405 MCF	✓	✓
Lifetime Gas Savings	16,456,870 MCF	21,041,502	25,261,089 MCF	✓	✓

Note: Includes savings from the Self-Direct, Pilots, and Education programs. Lifetime savings use a weighted-average measure life of 13.55 years for electric and 14.56 years for gas.

✓ Indicates performance goal achieved

** Indicates performance goal was not achieved*

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- DTE's EWR Program resulted in implementation contractors (ICs) establishing local offices and the hiring of local talent to operate and manage their respective programs
- Throughout the state of Michigan, over 2,400 contractors have actively participated with utilities in various EWR Programs
- Through 2017, over 250 Michigan-based jobs have been created by the ICs under contract with DTE

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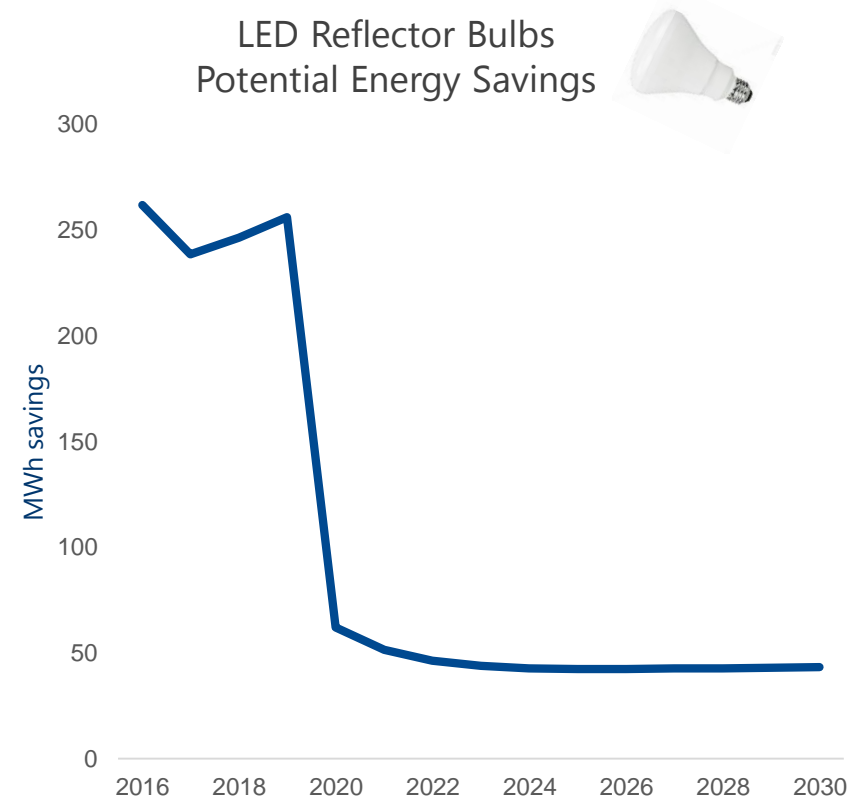
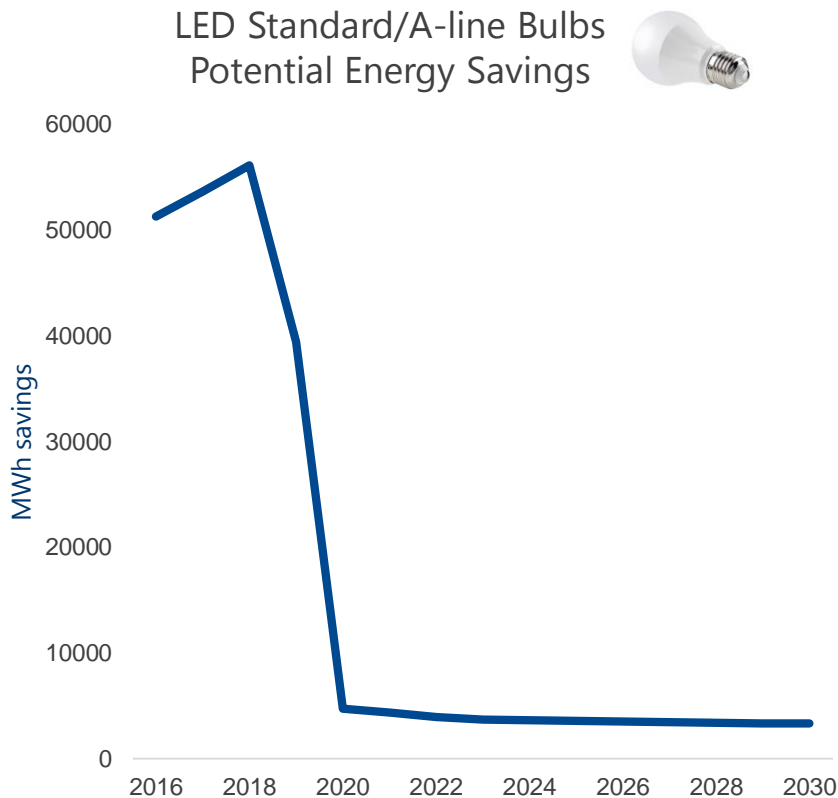
Michigan Legislature passed comprehensive statewide energy policy in December 2016, which became effective in April, 2017



	Electric		Gas	
	Old legislation	New legislation	Old legislation	New legislation
Mandates	1.00%	1.00% thru 2021 IRP thereafter	0.75%	0.75%
Spend Caps	2.00% of revenue	Eliminated	2.00% of revenue	Eliminated
Clean Energy Goal	None	35% EE & Renewables by 2025	None	None
Performance Incentive (% Spend) ¹	1.15% = up to 15%	1.00% = up to 15% 1.25% = up to 17.5% 1.50% = up to 20%	0.86% = up to 15%	0.75% = up to 15% 0.88% = up to 17.5% 1.00% = up to 20%
Decoupling	No	No	No	Yes ²

1. Legislation passed in December 2016 includes a three-tiered shared incentive mechanism that requires greater than 1.5% electric and 1% gas EWR to earn an incentive equal to 20% of program spend.
2. Utilities must achieve at least 0.5% gas savings to qualify for decoupling

Residential lighting baseline: Residential lighting currently makes up approximately 47% of the residential portfolio. The ENERGY STAR program is one of the most cost-effective programs at 10 cents/kWh



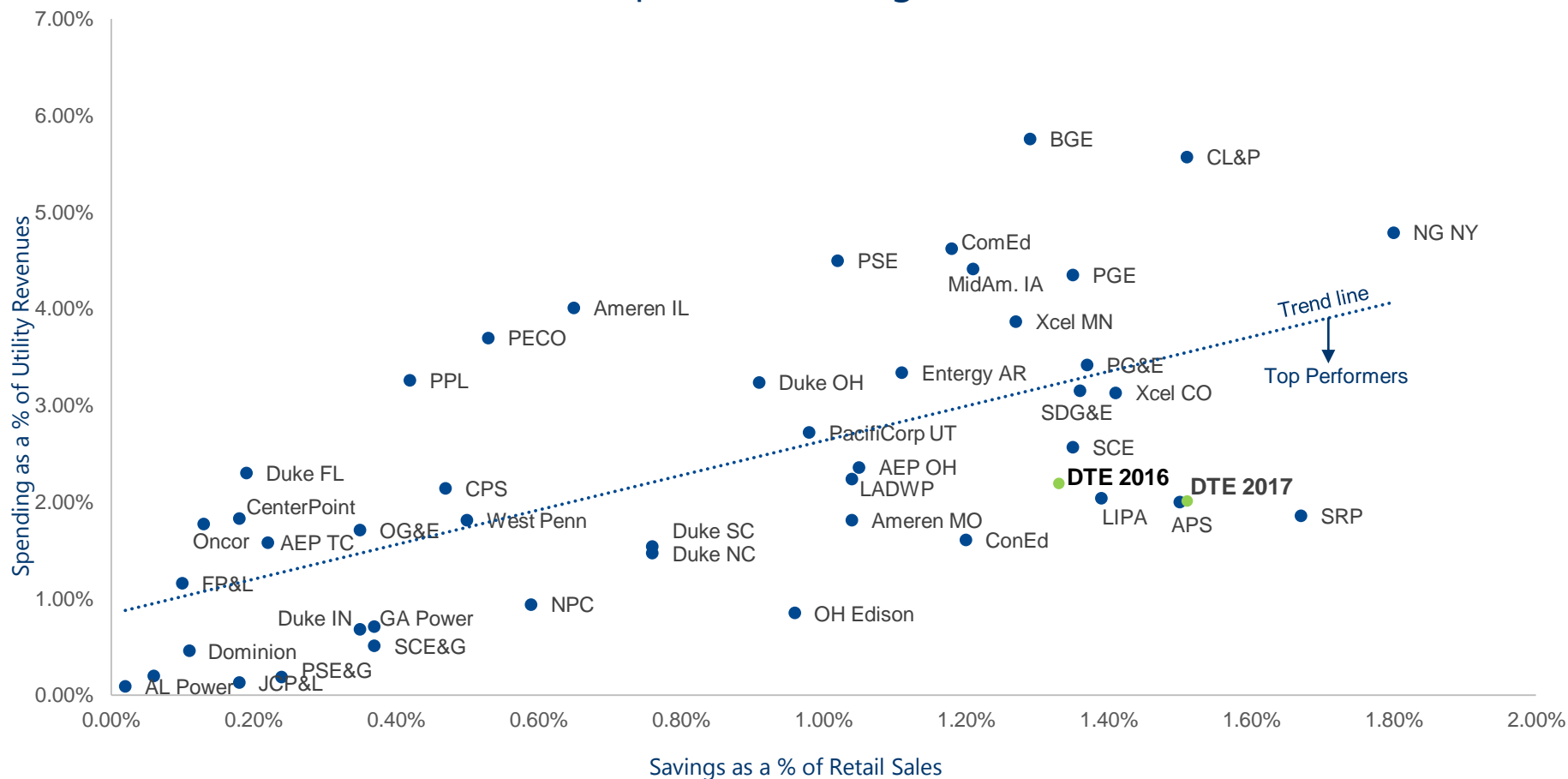
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DTE Energy has one of the top performing EWR portfolios in the nation



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2016 Spend vs. Savings (Electric)



Note: Savings as a % of retail sales is based on actual sales and not planned sales. EWR targets are established on planned sales

Source: The 2017 Utility Energy Efficiency Scorecard, Ben Foster, et al., American Council for an Energy-Efficient Economy.

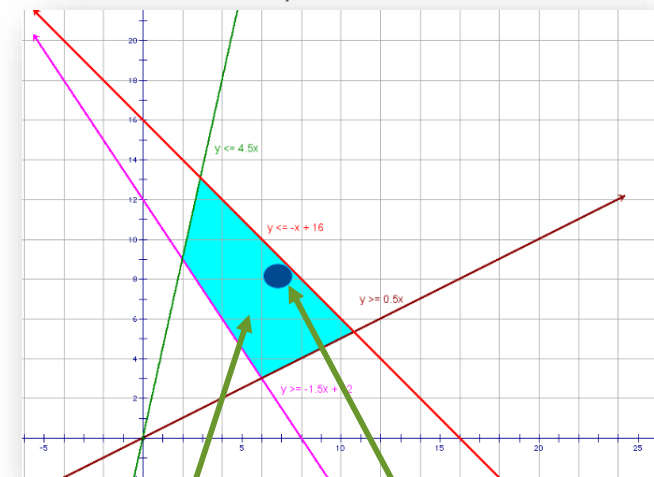
We have developed an EWR Portfolio Planning tool to determine the most optimal mix of program measures and drive essential changes to Future EWR Portfolios

EWR Solver Tool

- A tool which identifies the most optimal mix of program measures and maximizes the overall savings/budget – subject to actual operational limitations
- Important to EWR success given potential new constraints set by an IRP model
- The EWR solver tool uses Linear Programming to achieve the “best” outcome

Linear programming (aka linear optimization) is a method to achieve the best outcome (such as maximum energy savings) in a mathematical model whose requirements are represented by linear relationships

*Illustrative example



Feasible region

Best outcome

Thank You

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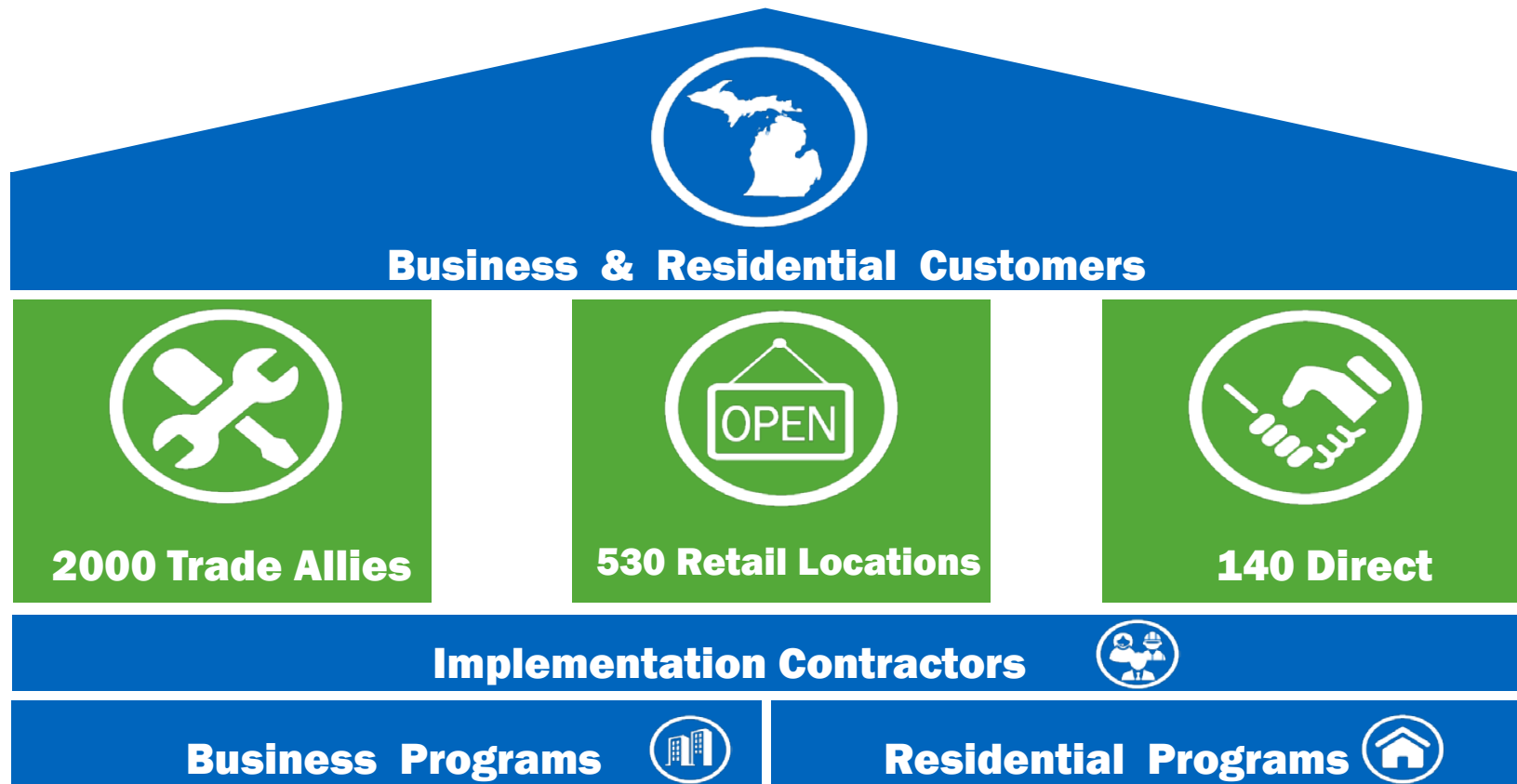


Consumers Energy

Count on Us®

2017 EWR Plan Highlights

May 15, 2018



- Deliver nearly 500,000 MWh or 1.5%
Electric Sales
- Deliver just over 2,600,000 Mcf or 1.0%
Natural Gas Sales

Helping Customers Reduce Energy Waste 4

ENERGY STAR Lighting & Appliance

HVAC & Water Heating

Appliance Recycling

Income Qualified

THINK Energy!

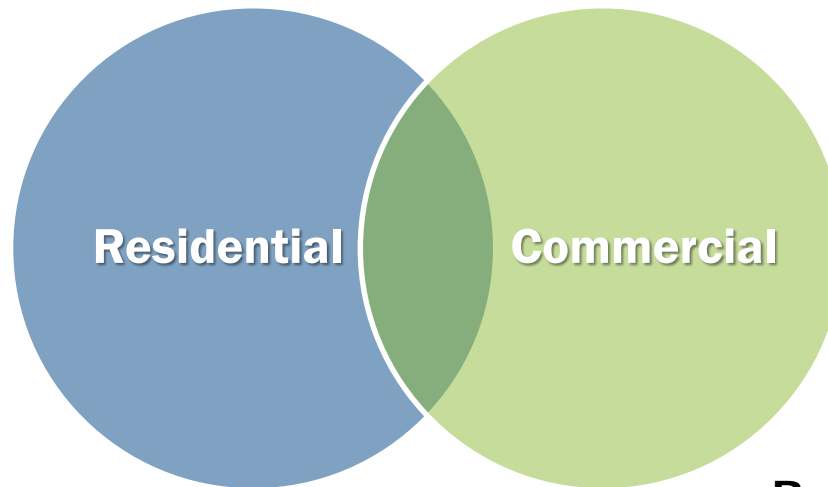
Home Energy Analysis

Home Performance with ENERGY STAR

Residential Multifamily

New Home Construction

Pilots



Prescriptive

Custom

Specialty

Midstream

RFP

Small Business

Business Multifamily

Pilots

Robust portfolio of programs

2017 Residential Key Highlights

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- Relaunch of the Appliance Recycling program
 - **24,500** recycled appliances
- Launched manufactured homes initiative reaching **2000** additional low income homes
- Rebates on nearly **19,000** furnaces
- Discounted over **2.9M** energy efficient bulbs
- THINK! ENERGY at **388** schools
- Overall customer satisfaction of **8.9** on **10** point scale

2017 Business Key Highlights

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- Started new initiatives for business program participation including: Midstream, **RFP**, Online Marketplace and National Accounts
- Completed **10,000th** small business lighting project and **18,000th** small business assessment
- Increased trade ally network from **218** to **370**
- Incentivized **30,000th** EWR project
- Overall Customer Satisfaction of **9.1** on a **10.0** point scale

Supporting the Michigan Economy

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- More than **2,000 trade allies** deliver energy efficiency products and services through our programs
- More than **530 retail locations** participate in the ENERGY STAR Lighting & Appliances program
 - ABC Warehouse, Ace Hardware, Batteries Plus, Best Buy, Costco, Dollar General, Hawthorne, Home Depot, Lowes, Meijer, Menards, Sargent Appliance, Sears, Wal-Mart and a variety of Pool Supply retailers.
- **11 Community Action Agencies** participate in our income qualified program
- Customer bill savings of over **\$2.0B** since 2009

Special initiatives – the “and”

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- Buy Michigan – **1000+** projects/ over **40** Michigan manufacturing allies
- Launched Online Store featuring instant rebates
- Light Up the City and food bank donations of over **175,000** LEDs
- Introduced the House of Worship rewards program with **500** additional Home Energy Audits

2017 Savings Achieved (Preliminary)

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Segment	First Year Net MWH Savings	Lifetime MWH Savings	First Year Net MW Savings	First year Net Mcf Savings	Mcf Lifetime Savings
Residential	188,925	1,837,099	16.1	1,288,211	13,192,252
Business	357,716	4,924,380	47.0	1,445,773	23,921,733
Programs Total	546,641	6,761,479	63.1	2,733,984	37,113,985
Support Services	15,480	15,480	-	78,114	78,114
Total	562,121	6,776,995	63.1	2,812,098	37,192,099

Lessons Learned (reaffirmed)

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- Leverage and expand trade ally network to deliver increased saving targets
- Communicate often with market actors
- Be flexible
- Be mindful of the pipeline and conversion rates

