ENERGY OPTIMIZATION

2012 Annual Report





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EXECUTIVE SUMMARY



The purpose of this annual report is to highlight the general results of DTE Energy's

(DTE) 2012 Energy Optimization (EO) program, communicate program changes, and provide policy overview and future guidance.

DTE's EO program launched in June 2009 as a result of the Clean, Renewable and Efficient Energy Act, also known as Public Act 295 (PA 295), and set the pace to be among the fastest growing EO programs in North America. Upon approval of the EO legislation on October 6, 2008 and the subsequent development and approval of an EO plan, DTE had just seven months to meet the first year's goals of 0.3% electric savings and 0.1% gas savings. DTE has aggressively implemented its energy efficiency programs, achieving standards that reached 1.0% electric savings and 0.75% gas savings in just under four years. Both gas and electric utilities exceeded these rising minimum legislative requirements each year.

DTE continued to build on its momentum from the 2009 launch by enhancing the scope of existing programs and adding new program options to the portfolio. Since 2009, more than 700,000 customers have directly participated in DTE's EO programs. Customers have upgraded equipment in their homes and their businesses, helping them to become more energy efficient, and they have been provided with education, tips, strategies and tools to help them save money on their energy bills. As a result, DTE has saved over 1,700 gigawatt hours (GWh) or approximately 3.9% of planned retail sales for electric customers, and 3,800 million cubic feet (MMcf) or approximately 2.4% of planned retail sales for gas customers since the program started. The savings achieved so far will continue for years into the future.

DTE continued to pursue the same foundational EO programs in 2012 that were launched in 2009. The 2012 EO program year was generally executed as it was originally designed; however, some minor adjustments were made along the way. DTE developed targeted campaigns as it saw opportunities to leverage demand in specific areas, and adjusted some rebates based on customer demand. For example, adjustments in rebates and delivery approaches were made in programs throughout the year, including the Audit & Weatherization program. DTE continued to pursue general education and awareness of EO offerings by enhancing the content of its web site and expanding use of social media and contests. In 2012, DTE increased targeted marketing to meet segment specific needs for energy efficiency information. These strategic initiatives and targeted marketing efforts have resulted in increased awareness, improved experiences and higher satisfaction among our customers. Pilot programs continued to work well in 2012. DTE's efforts to pilot new programs and approaches provided valuable learning and generated a number of new programs that should make us more effective in the future. Finally, DTE's ability to run the programs effectively has improved through the maturity of systems and back-office processes.



EO PROGRAM RESULTS

Goals and Targets

The main operational goal of the 2012 EO program was to maintain the momentum that the program achieved since the launch in 2009 by continuing to grow customer acceptance and adoption of EO measures. The 2012 goals were to:

- Achieve legislated electric energy savings of 1% of 2011 planned retail sales or 455 gigawatt hours (GWh), and achieve legislated gas energy savings of 0.75% of 2011 planned retails sales or 1,186 million cubic feet (MMcf).
- 2. Ensure that EO programs are cost effective. Cost Effectiveness Tests (CETs) are performed to ensure that the overall goal of reducing energy use in a cost effective manner for the utility and its customers is being achieved. DTE uses the Utility System Resource Cost Test (USRCT) and the Total Resource Cost (TRC) test to measure the effectiveness of the EO programs. Specifically the goal of each EO program (with the exception of low-income) is to meet the minimum required USRCT score of 1.0. The low-income programs were excluded from the calculations because Section 71(3) (g) of PA 295 specifically excludes low-income in the requirement for cost-effectiveness.

Spending and Savings

Verified net energy savings are DTE's reported savings after they have been adjusted based on the results of a review by our independent evaluation contractor, Navigant Consulting Inc. (Navigant), and the application of Installation Rate Adjustment Factors (IRAF) and Net-to-Gross Ratios (NTGR). In 2012, DTE applied a 0.9 net-to-gross factor to all programs except low-income, pilots and education programs. Planned savings refer to DTE's Amended EO Plan projected savings for 2012 as approved by the Michigan Public Service Commission (MPSC) on June 3, 2010.

Spend, as used in this annual report, refers to the cash expenditures or commitments made by DTE in implementing the EO program. Spend does not contemplate the eventual treatment of such costs as operations and maintenance or capitalization. The 2012 actual EO program costs include: O&M expenses, pre-tax return on capitalized costs and return of capitalized costs (amortization) plus carrying charges on over/ (under) recovered balances.

DTE has adopted verified net savings for reporting of energy savings in 2012 as agreed to in the EO Collaborative. The Amended EO Plan forecasted gross energy savings. Even with this change in methodology, DTE's EO program resulted in total verified net electric savings of 611 GWh, or 1.33% of 2011 planned retail sales, as compared to the minimum legislative requirement of 455 GWh, and nearly achieved the forecast gross savings of 626 GWh. For DTE Gas, the total verified net gas energy savings was 1,474 MMcf, or 0.921% of 2011 planned retail sales, as compared to the minimum legislative requirement of 1,186 MMcf, and exceeded the forecasted gross savings of 1,375 MMcf.

In 2012, DTE Electric spent \$69.7 million compared to the planned \$74.4 million, whereas DTE Gas spent \$28.6 million compared to the planned \$27.8 million. The actual spend for DTE Electric was lower primarily due to lower spending on Commercial and Industrial (C&I) programs and allocated administrative costs. The actual spend for DTE Gas was higher primarily due to higher spending on Commercial and Industrial (C&I) and End User Transportation (EUT) programs and low-income programs. While DTE Gas overspent its projected Amended EO Plan cost by \$0.8 million or 2.5%, the legislated energy savings minimums were exceeded by 288 MMCF or 24%.

Chart 1 summarizes the overall EO program 2012 spending and verified net savings for DTE Electric and DTE Gas.

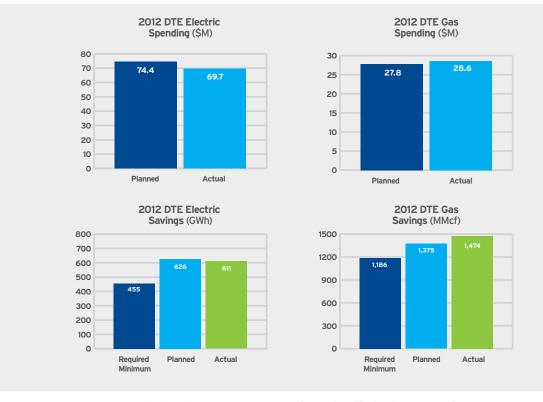


Chart 1 – 2012 EO Program Spending and Verified Net Energy Savings

Each EO program has its own spending and verified net saving requirements. For DTE Electric, collectively, the residential and low-income programs provided 300 GWh of verified net energy savings, and C&I programs, including Self-Direct, provided 256 GWh. DTE Electric achieved 55 GWh savings from the education and pilot programs. For DTE Gas, collectively, the residential and low-income programs provided 644 MMcf of verified net energy savings, and C&I programs, including Self-Direct, provided 721 MMcf. DTE Gas achieved 108 MMcf savings from the Education and Pilot programs.

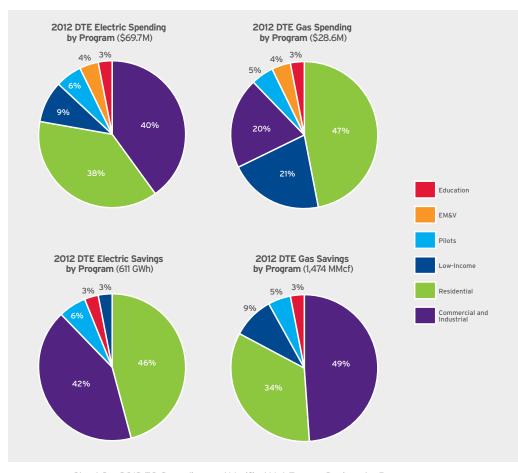


Chart 2 – 2012 EO Spending and Verified Net Energy Savings by Program

Chart 2 displays program spending and verified net savings for the various EO programs in 2012.

DTE 2012 EO Programs—Lifecycle Dollar Savings (All Values in Dollars)

	DTE Electric		DTE Gas	
Program	Present Value	Nominal Value	Present Value	Nominal Value
Residential				
Residential and Small Business ENERGY STAR Products	143,617,537	220,575,786	1,979,720	3,044,557
Residential Appliance Recycling	30,625,987	44,574,301	-	-
Residential HVAC	2,942,720	5,045,673	20,446,368	39,667,345
Multifamily – Standard	3,198,800	4,989,255	3,888,014	6,442,842
Residential Audit & Weatherization (includes Elementary School Education & HEC)	13,184,559	20,855,012	14,523,231	24,363,192
Total Residential (Excluding Low-Income)	193,569,603	296,040,027	40,837,333	73,517,936
Commercial & Industrial				
C&I Prescriptive - All (includes C&I ENERGY STAR Lighting, Multifamily C&I)	88,485,291	153,973,774	27,543,566	43,954,991
C&I Non-Prescriptive (includes C&I Custom, C&I RFP, C&I New Construction, and Self-Direct)	88,262,290	143,506,130	18,026,653	27,790,807
Total C&I	176,747,581	297,479,904	45,570,219	71,745,798
Pilot	27,725,631	46,964,535	4,416,092	6,733,189
Education	15,136,734	24,609,166	2,454,867	3,742,920
Total EO Portfolio (w/o Low-Income)	413,179,549	665,093,632	93,278,511	155,739,843
Low-Income – All (includes EEA, LI Multifamily, LI Audit & Weatherization)	14,144,877	22,339,277	9,522,965	16,146,188
Total EO Portfolio	427,324,426	687,432,909	102,801,476	171,886,031

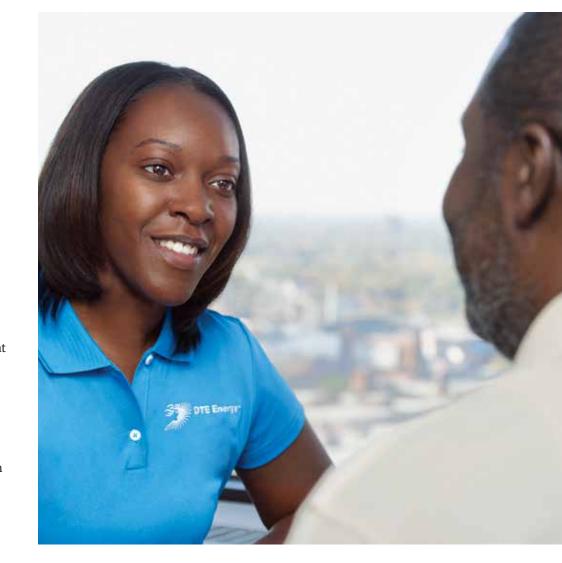
Long-term EO Impacts

Even though Michigan's EO programs are only four years old, they have matured quickly and regulators and other participants are already looking beyond the first-year energy savings goals set out in PA 295 toward longer term goals; such as overall lifecycle savings, both in dollars and energy; the average life of measures being installed; and reduction in future peak electrical demands.

This section provides definitions and the 2012 EO program results for a number of these measures of long-term interest.

- I. Lifecycle Dollar Savings: This represents the dollar savings resulting from the current and future energy costs avoided as a result of an energy efficiency action over the effective life of that action. Lifecycle dollar savings may be presented for an individual measure, a collection of measures, a program or a portfolio of programs. As presented for DTE's programs the lifecycle dollar savings are based on verified net savings, which have been adjusted for free riders. Lifecycle dollar savings may be presented either in nominal terms or as the present value of those savings.
 - A. **Nominal Value**: Total market-based avoided energy costs based on current and future expected energy costs over the effective lifecycle of the energy efficiency measures installed or actions taken.
 - B. **Present Value**: Total market-based avoided energy costs based on current and future expected energy costs over the effective lifecycle of the energy efficiency measures installed or actions taken where the time value of money is taken into account through discounting future years at an appropriate discount rate.

Table 1 displays that DTE's 2012 EO programs produced very significant dollar savings for its customers for years to come.



DTE 2012 EO Programs—Lifecycle Energy Savings

	DTE Electric	DTE Gas
Program	MWH	Mcf
Residential		
Residential and Small Business ENERGY STAR Products	2,169,343	316,888
Residential Appliance Recycling	433,095	_
Residential HVAC	42,959	3,552,175
Multifamily – Standard	48,630	642,666
Residential Audit & Weatherization (includes Elementary School Education and HEC)	195,000	2,379,722
Total Residential (Excluding Low-Income)	2,889,027	6,891,450
C&I		
C&I Prescriptive - All (includes C&I ENERGY STAR Lighting, Multifamily C&I)	1,355,913	4,418,186
C&I Non-Prescriptive (includes C&I Custom, C&I RFP, C&I New Construction, and Self-Direct)	1,376,416	2,904,988
Total C&I	2,732,329	7,323,173
Pilot	416,878	707,511
Education	216,167	393,183
Total EO Portfolio (w/o Low-Income)	6,254,401	15,315,317
Low-Income – All (includes EEA, LI Multifamily, LI Audit & Weatherization)	213,992	1,576,194
Total EO Portfolio	6,468,393	16,891,511

II. Lifecycle Energy Savings: This represents the total cumulative program energy savings (GWh or MMcf) produced by the energy-saving actions taken for all of the years in the particular actions effective lives. Again, as presented here these represent net savings with free-riders removed.

Table 2 displays the long-term energy savings associated with the cost savings in Table 1–2012 Lifecycle Dollar Savings.



DTE 2012 EO Programs DTE Electric Peak Demand Savings

Residential	MW
Residential and Small Business ENERGY STAR Products	0.60
Residential Appliance Recycling	5.42
Residential HVAC	0.47
Multifamily – Standard	0.06
Residential Audit & Weatherization (includes Elementary School Education and HEC)	2.08
Total Residential (Excluding Low-Income)	8.63
C&I	
C&I Prescriptive – All (includes C&I ENERGY STAR Lighting, Multifamily C&I)	36.72
C&I Non-Prescriptive (includes C&I Custom, C&I RFP, C&I New Construction, and Self-Direct)	21.62
Total C&I	58.34
Pilot	7.65
Education	5.13
Total EO Portfolio (w/o Low-Income)	79.75
Low-Income – All (includes EEA, LI Multifamily, LI Audit & Weatherization)	0.31
Total EO Portfolio	80.06

III. Peak Demand Reduction (kW): This represents the aggregate reduction in DTE Electric's service area load at the time of the Michigan zone of MISO's expected peak demand that is estimated to result from the measures installed and actions taken by customers participating in the EO program (nominally, from 3 to 7 PM on a weekday in July).

One particular concern for electric EO programs is to achieve significant peak demand reductions to minimize the need for future power plants.

Table 3 shows that the DTE Electric 2012 EO program achieved significant demand reductions, as well as energy savings.



Table 3 - DTE Electric Peak Demand Savings

Table 2 – Lifecycle Energy Savings

DTE EO 2012 Programs DTE Cost of Conserved Energy (CCE)

	DTE Electric	DTE Gas
Residential	Cents/kWh	Cents/ccf
Residential and Small Business ENERGY STAR Products	0.60	13.00
Residential Appliance Recycling	0.95	-
Residential HVAC	2.26	19.33
Multifamily – Standard	3.89	11.11
Residential Audit & Weatherization (includes Elementary School Education and HEC)	2.84	22.65
Total Residential (Excluding Low-Income)	0.89	19.42
C&I		
C&I Prescriptive – All (includes C&I ENERGY STAR Lighting, Multifamily C&I)	0.65	8.52
C&I Non-Prescriptive (includes C&I Custom, C&I RFP, C&I New Construction, and Self-Direct)	0.77	6.91
Total C&I	0.71	7.88
Education & Pilots	0.71	20.45
Total EO Portfolio (w/o Low-Income)	0.79	13.98
Low-Income-All (includes EEA, LI Multifamily, LI Audit & Weatherization)	2.84	38.02
Total EO Portfolio	0.94	16.77

Table 4 – DTE Cost of Conserved Energy

IV. Cost of Conserved Energy: The Cost of Conserved Energy expresses the measure, program, or portfolio costs in per unit terms based on the total energy savings over the effective lifecycles of the specific measures or actions taken. In this calculation the future years' energy savings volumes are discounted by the appropriate discount rate to reflect time value of money. The starting point is, once again, net energy savings with free riders removed.

Table 4 demonstrates how cost effective the 2012 EO programs were in terms of the costs per unit of the energy savings achieved.

V. Weighted Average Measure Life: The average life, in years, of all the various measures installed or actions taken in a program or the entire portfolio when each measure's life is weighted by the energy savings it produces relative to all the energy savings in the program or portfolio.

Table 5 summarizes the average measure life for 2012 EO program at the individual program level and for the program as a whole.

Cost Effectiveness

Cost Effectiveness Tests (CETs) are performed to ensure that the overall goal of reducing costs in a cost effective manner for the utility and its customers is being achieved. DTE uses the Utility System Resources Cost Test (USRCT) and the Total Resource Cost (TRC) test to measure the effectiveness of the EO programs. The DSMore cost analysis tool was used to calculate and report cost effectiveness for the 2012 programs using the USRCT. Additionally, a TRC test was calculated for the DTE EO programs. The TRC test is defined as the total avoided costs divided by the sum of program costs plus the participant's costs.

There are two major groups of inputs that are used in DSMore. These include the utility input assumptions and the program inputs. Utility input assumptions contain information that is specific to the utility and include items such as load shape, the commodity and non-commodity cost of energy, customer energy rates, line losses, weather and discount rates. The utility input assumptions used in this reconciliation analysis are the same as those that were used in developing DTE Electric's and DTE Gas's approved Amended EO Plans.

DTE EO 2012 Programs Weighted Average Measure Life

Program	DTE Electric Program Weighted Life	DTE Gas Program Weighted Life
Residential		
Residential and Small Business ENERGY STAR Products	9.06	11.08
Residential Appliance Recycling	8.00	_
Residential HVAC	11.24	15.06
Multifamily – Standard	9.42	15.61
Residential Audit & Weatherization (includes Elementary School Education and HEC)	9.63	15.11
Total Residential (Excluding Low-Income)	8.98	14.95
C&I		
C&I Prescriptive - All (includes C&I ENERGY STAR Lighting, Multifamily C&I)	11.40	10.62
C&I Non-Prescriptive (includes C&I Custom, C&I RFP, C&I New Construction, and Self-Direct)	10.79	10.38
Total C&I	11.09	10.52
Education & Pilots	10.80	10.00
Total EO Portfolio (w/o Low-Income)	10.09	12.48
Low-Income-All (includes EEA, LI Multifamily, LI Audit & Weatherization)	9.59	14.61
Total EO Portfolio	10.07	12.68

CET measures are calculated using participant costs, customer incentive costs, program, performance incentive costs, education costs and pilot costs. As indicated above, the CETs were calculated at program levels and for groups of programs, including the low-income programs, five residential program groups and two C&I program groups. The five residential program groups include: 1) Appliance Recycling, 2) ENERGY STAR products, 3) HVAC, 4) Audit & Weatherization and 5) Multifamily. The two C&I groups include: 1) Prescriptive, and 2) Non-prescriptive.

DTE's Amended EO Plan resulted in meeting legislated energy savings minimums at a specific cost. As mentioned earlier, DTE Electric underspent its projected Amended EO Plan cost by \$4.7 million and exceeded the legislated energy savings minimums by 156 GWh or 34% (611 GWh versus the legislated minimum of 455 GWh). While DTE Gas overspent its projected Amended EO Plan cost by \$0.8 million or 2.5%, the legislated energy savings minimums were exceeded by 288 MMCF or 24%. Even before performing any cost tests, these two facts in combination show that the program was very cost effective.

Based on the analysis performed using DSMore, DTE's EO portfolio of programs passed the CETs. For DTE Electric, a USRCT score of 5.84 was achieved based on the 611 GWh verified net energy savings. For DTE Gas, a USRCT score of 3.63 was achieved based on the 1,474 MMcf verified net energy savings.

Table 5 – Weighted Average Measure Life

Revenue

In 2012, DTE Electric and DTE Gas collected \$69.6 million and \$25.9 million, respectively, in base EO surcharge revenue. "Base" surcharge revenue reflects EO actual revenue realized excluding the revenue recovery for authorized performance incentives. Revenues identified in the chart below are the actual amounts that were billed to DTE customers in 2012 through the EO surcharges approved by the MPSC. These surcharges appear as a line item on the customer's monthly bill statement.

Chart 3 displays the 2012 revenues collected.

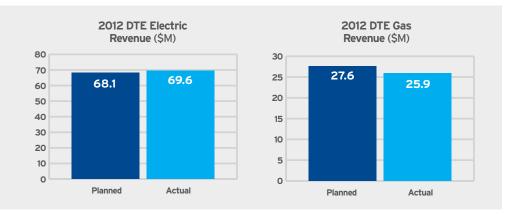


Chart 3 – 2012 EO Program Revenues (Surcharges)

Most of the variance in Chart 3 is due to unusually warm weather throughout the year. **Chart 4** displays revenue collected for EO programs in 2012 by customer type.

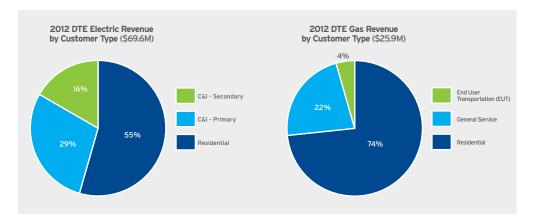


Chart 4 – 2012 EO Revenues (Surcharges) by Customer Type

Surcharges

Initial surcharges were established, approved by the Commission, and billed starting in June 2009 and continued through the first five months in 2010. Upon approval of the Amended EO Plan on June 3, 2010, revised surcharges were billed to DTE electric and gas customers beginning in June 2010. These surcharges continued to be billed in 2011. In addition, on February 8, 2011, the Commission authorized DTE to begin billing an incremental surcharge to recover the 2009 EO Plan performance incentive that was approved by the Commission in the 2009 DTE Electric EO Reconciliation. Beginning March 1, 2011, and ending on February 29, 2012, this surcharge was added to the base surcharge and billed to customers as one combined EO surcharge. On November 10, 2011, the Commission authorized DTE Electric to include an incremental surcharge, beginning January 1, 2012 and ending on December 31, 2012, to recover the 2010 EO Plan performance incentive as approved by the Commission in the 2010 DTE Electric and DTE Gas EO Reconciliations. In addition, the base surcharge amount for C&I customers changed on January 1, 2012 consistent with the Amended EO Plan authorized by the Commission.

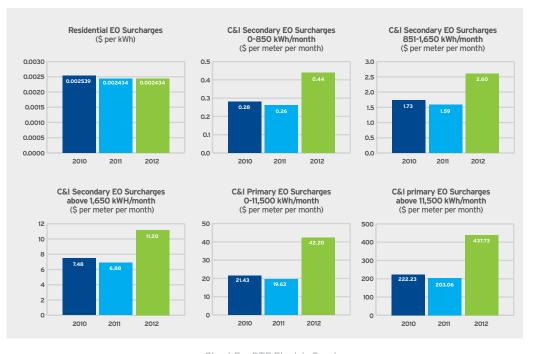


Chart 5 – DTE Electric Surcharges

Electric Surcharge

In 2012, EO base surcharges remained the same for residential electric customers while increasing for commercial and industrial (C&I) customers when compared to the prior year. The increase in C&I surcharges was due to balancing short-term affordability concerns in the earlier program years with the expected growth of the EO commercial and industrial offerings.

Chart 5 outlines the 2012 EO base surcharges compared to the previous years.

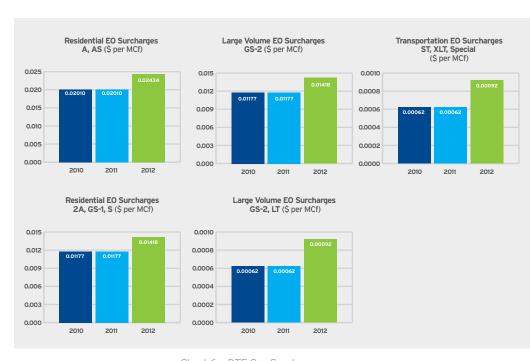


Chart 6 – DTE Gas Surcharges

Gas Surcharge

In 2012, EO base surcharges increased for all customers when compared to the prior years. The increases reflect the higher energy savings goals and lower sales forecast.

Chart 6 outlines the 2012 EO base surcharges compared to the previous years.



Program Participation

Customers participating in EO programs have increased steadily each year since 2009 resulting in over 765,000 customers that have participated in the Residential and Commercial and Industrial programs. In 2012, more than 286,000 customers participated in the EO program.

Chart 7 summarizes the number of customers participating in the EO program by year.

Chart 8 summarizes the number of residential and C&I customers participating in the EO program in 2012.

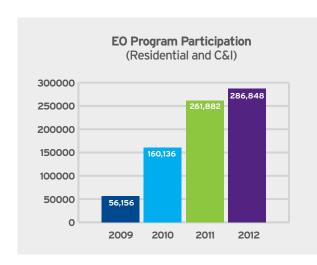


Chart 7 – EO Program Participation 2009 through 2012

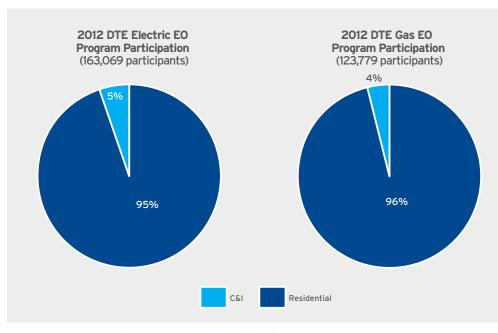


Chart 8 – EO Program Participation by Customer Type



LEGISLATIVE REQUIREMENTS

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Michigan's Energy Optimization (EO) standard, created under Public Act 295 of 2008

(PA 295 or the Act), requires all gas and electric utilities in the state to implement programs to reduce overall energy usage by specified targets, in order to reduce the future costs of gas and electric service to customers. This report complies with Section 95(2) (e) of the Act; summaries of the report's major findings are below.

Key elements of this legislation include the following:

Energy Savings Targets

- Electric utilities were required to achieve 0.3% savings in 2009; 0.5% in 2010; 0.75% in 2011; and 1.0% in 2012 and each year thereafter.
- Natural gas utilities must achieve 0.1% savings in 2009; 0.25% in 2010; 0.5% in 2011; and 0.75% in 2012 and each year thereafter.
- Beyond 2015: The Michigan Public Service Commission (MPSC) can suspend the EO program in 2015 if found not to be cost effective.

Compliance

- Electric and Gas utility providers must offer cost effective EO and conservation programs to residential, commercial, industrial and low-income customers.
- Providers can operate their own EO compliance programs or fund a state program.
- EO plans must be filed, reviewed and approved or rejected by the MPSC.

Funding

- Legislation limits annual spending for EO via a customer surcharge with revenue recovery capped at 1.7% for primary customers and EUT customers. Revenue recovery is capped at 2.2% for all other customers.
- Funds received from a customer class (residential, commercial and industrial (C&I) secondary, and C&I primary) must be spent on that class. All classes will contribute toward low-income Residential programs.

Utility (Performance) Incentives

- A financial incentive for utility providers can be earned for exceeding the EO performance standards.
- The total amount of a financial incentive shall not exceed the lesser of the following amounts:
- (a) 25% of the net cost reductions experienced by the provider's customers as a result of implementation of the EO plan
- (b) 15% of the provider's actual EO program expenditures for the year

EO Surcharges

The EO programs are paid for by all customers via a surcharge placed on their electric and natural gas bills. An EO surcharge will appear as a line item on the customer's monthly bill statement:

- The amount of the surcharge depends on what Rate Class (residential, commercial and industrial (C&I) secondary and C&I primary) the customer is in and how much energy they use. For C&I electric customers, the amount paid is also based on the number of meters.
- An EO surcharge will appear as a line item on the customer's monthly bill statement.
- All customers assist in funding the low-income portion of the program.



EO PROGRAM PRO

DTE's EO programs are designed to help reduce customers' energy use

by increasing customer awareness of energy saving possibilities, and providing products and services such as rebates, tips, tools, strategies and energy efficiency education to help customers make informed energy saving decisions. Many of the programs in 2012 were continuations of programs launched in 2009, although some minor program adjustments were implemented. DTE continually works to offer EO programs that assure all customer segments are encouraged to participate. Programs are designed to capture both electric and natural gas savings. For those DTE customers with only electric or only natural gas service, efforts were made to coordinate and align with other utilities so that these customers could easily take advantage of energy efficiency program offerings across both fuel types.

Program Offerings

EO programs include offerings available to residential customers, commercial and industrial customers, pilot programs, and general education and awareness programs. In addition, the Evaluation, Measurement and Verification (EM&V) function verifies net energy savings reported by the EO programs. The programs are managed by DTE program managers and operated by expert implementation contractors, primarily utilizing local labor and products.

Each program offers a combination of energy efficiency products, customer incentives or rebates, and education. Following is an overview of each program category.

 Residential programs offer homeowners products, services and rebates encompassing appliance recycling; lighting; heating, ventilating and air conditioning (HVAC); weatherization; home energy assessments; low-income; energy education; and behavioral programs.

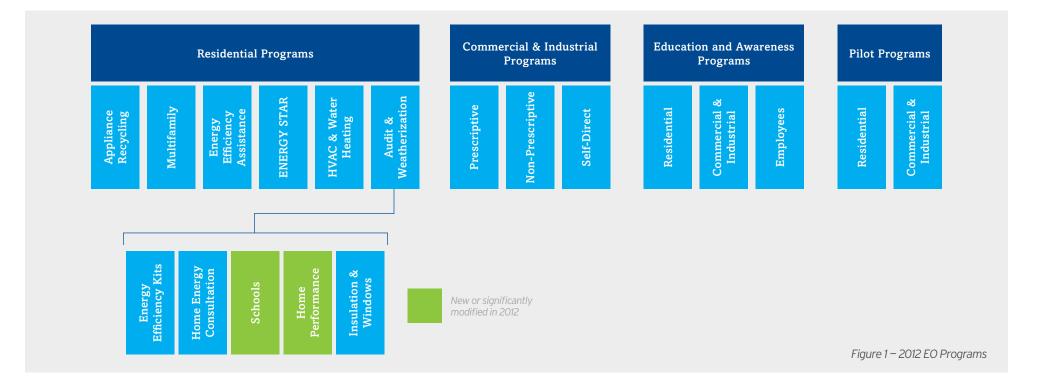
- Commercial and Industrial programs offer businesses products; services; prescriptive rebates for specific equipment replacement such as lighting, boilers, pumps, compressors, etc., custom programs providing rebates per kilowatt hour (kWh) of electricity savings or per Mcf of natural gas savings for a comprehensive system or industrial process improvement; and energy education and pilot programs.
- Pilot programs focus on new and emerging experimental programs to fit longer-term program portfolio needs, test the cost-effectiveness of emerging technologies, and assess customer adoption of new technologies and market acceptance of existing technologies using new approaches.

 Education and Awareness programs are designed to raise customer energy efficiency awareness in an effort to help save energy and to reduce energy costs. A secondary objective is to raise awareness of the DTE website and other social media, which provide channels for customers to engage in specific EO programs offered.

EO programs require independent verification of the utilities' claimed energy savings. This work is performed by an independent Evaluation, Measurement, and

Verification (EM&V) contractor and must be performed to industry standards and guidelines developed by the Evaluation Workgroup of the MPSC EO Collaborative. Currently Navigant Consulting, Inc. fills this role for DTE.

Each year new program options continue to be added to the EO portfolio. Refer to **Figure 1** for a list of programs offered in 2012. The green, boxed items below indicate programs that were new or significantly modified in 2012.



Following is a summary of each EO program providing a description, highlights, challenges and overall program results from 2012.

Residential Programs

The objective of the Residential EO programs is to increase customer awareness and demand for energy efficient products and services. In 2012, the Residential EO programs used various marketing tactics and community outreach events to promote and inform customers of program offerings. These marketing tactics included specific program information conveyed through DTE's website, email, social media (Facebook and Twitter), direct mail, bill inserts, newsletters, radio and television ads, billboards, advertisements in local newspapers, in-store events and home shows.

In 2012, Home Energy Consultations and school education options were added in the Audit & Weatherization program. New furnace testing/replacement program options were offered in the low-income space. Rebate amounts were adjusted to meet market demand and budget constraints. Details of each offering are provided later in this report.

In 2012, DTE's Residential EO programs performed well. In total, the Residential EO programs achieved 299.7 GWh of verified net electric savings, which is 97% of plan, and 644.4 MMcf of verified net gas savings, which is 88% of plan. In a recent internal benchmarking, DTE's Residential EO programs have been ranked highly with respect to cost effectiveness and savings compared to other utility companies. Overall customer satisfaction with the programs was 93.8% for 2012. Chart 9 summarizes the electric and gas spending, and verified net energy savings for all the 2012 EO Residential programs. **Chart 10** is a summary of the spending and verified net energy savings achieved by each Residential EO program in 2012.

In 2012, more than 274,000 customers participated in the Residential EO program. **Chart 11** summarizes the number of customers participating in the EO program in 2012.

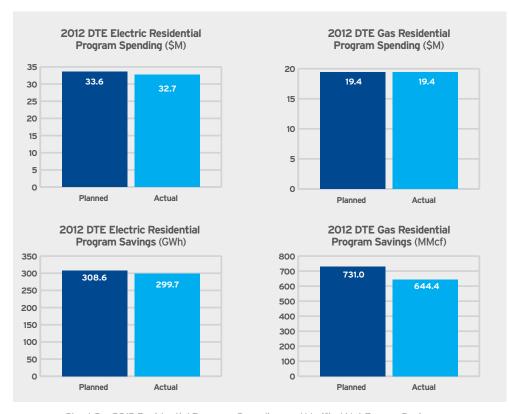


Chart 9 – 2012 Residential Program Spending and Verified Net Energy Savings

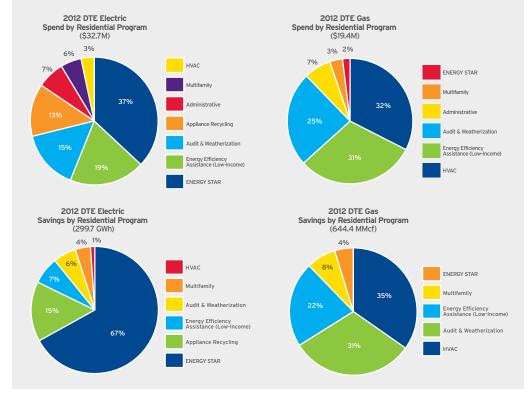


Chart 10 – 2012 Spending and Verified Net Energy Savings by Residential Program

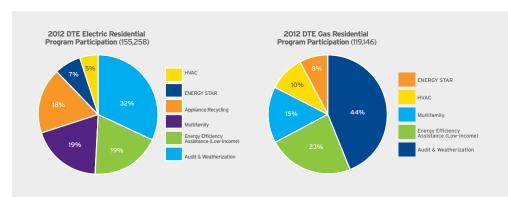


Chart 11 – 2012 EO Customer Participation by Program

Following are additional details for each Residential EO program and how they performed in 2012.

APPLIANCE RECYCLING PROGRAM (DTE ELECTRIC ONLY)

Program Description

The objective of the Appliance Recycling program was to produce cost-effective, long-term annual energy savings by promoting the early retirement and recycling of operable, inefficient appliances from DTE Electric households in an environmentally safe manner. The program removes older inefficient working refrigerators and freezers from the electric grid and recycles 95% of the appliance. Customers can also recycle a dehumidifier or room A/C when having a refrigerator or freezer picked up. Customers benefit by having the old equipment removed, receiving a rebate and using less energy in the future. At the same time, DTE educated its customers on the additional energy cost incurred by operating a second, inefficient appliance.

Highlight

• Customers received a \$40 rebate for a refrigerator or freezer and \$20 for a dehumidifier or room A/C.

Challenges

- The unit goal was raised 50% in 2012 leading to participation by 1.6% of electric customers.
- By the end of 2013, DTE will have picked up appliances from 5% of our electric customers.

Accomplishments

• Cycle time, the amount of time from the customer contact to make an appointment to the time the customer's rebate check was mailed was 22.56 days, which is 25% below the target of 30 days.

Collaboration Efforts

- DTE collaborated with Sears and ABC Warehouse to pick up old refrigerators and freezers when delivering new ones.
- Sears and ABC Warehouse increased their share of pickups to 10.1% of total units collected in 2012 versus 3.2% in 2011.

Lessons Learned

- Customers are satisfied with all aspects of the program (96% satisfied in 2012).
- Bill inserts are our best marketing channel. 30% of customers identified a bill insert as how they found out about the program.

Spend and Verified Net Savings Results

- DTE Electric spent \$4.4 million on the Appliance Recycling program in 2012. This amount was approximately \$1.2 million less than the \$5.6 million plan. The underspend is primarily due to reallocations of funds in the residential portfolio to support growth in other areas, such as the Home Energy Consultation option under the Audit & Weatherization program.
- The Appliance Recycling program saved 45.6 GWh of verified net energy savings. This amount was 6.7 GWh less than the 52.3 GWh plan.
- This program is offered to only residential electric customers and not to gas customers, so there is no gas savings or spend.

Chart 12 summarizes the 2012 DTE Electric spend and verified net savings results for the program.

Program Participation

- Customer participation in the program has consistently increased since 2009.
- Unit pickups increased from 19,960 in 2011 to 28,864 in 2012, a 45% increase.

Chart 13 summarizes the number of customers who have participated in the program since 2009.

Program Outlook

- As the program grows more mature and the proportion of customers who have already participated increases, it will be harder to achieve goal because there are less inefficient appliances on the grid.
- The program's marketing was changed for 2013 to freshen the program channel strategy, messaging and branding look.
- Spending and savings from the program are expected to increase consistently beyond 2012.

Chart 14 summarizes the spending and savings projections beyond 2013 for the program.

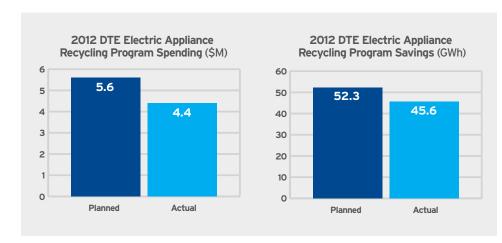


Chart 12 – Appliance Recycling Spending and Verified Net Savings

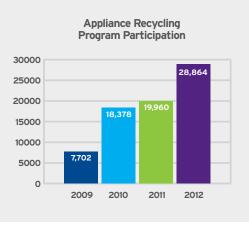


Chart 13 – Appliance Recycling Program Participation

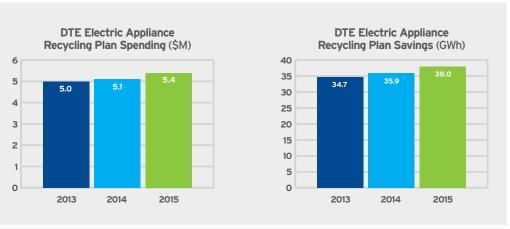


Chart 14 - Appliance Recycling Program Outlook

MULTIFAMILY PROGRAM (DTE ELECTRIC AND DTE GAS)

Program Description

The objective of the Multifamily program was to produce electric energy savings in multifamily buildings with five or more units through the direct installation of energy saving measures. Typical in-unit measures included CFLs, LED Night Lights, energy efficient showerheads, energy efficient kitchen and bath aerators, programmable thermostats and pipe wrap insulation where the units had electric water heating. There is no cost for the in-unit installations. Energy efficiency education was also delivered at all phases of the project to property owners, managers and to individual tenants. Since the Multifamily program is a direct-install program, tenants did not receive incentive payments.

In the building common areas, energy efficient measures could be installed as well. Building owners receive rebates and are responsible for paying a portion of the cost of the installed common area measures. Energy savings and costs for measures installed in the common areas are included in the C&I prescriptive program for reporting purposes.

Highlights

- 57,406 units were outfitted with energy efficient measures.
- 92 electric "common area" jobs were completed.
- 49 gas "common area" jobs were completed

Challenges

• Diminishing opportunities as program matures.

Accomplishments

- Programmable thermostats were added to the program to better meet customer needs.
- 2012 saw increased "common area" participation among property owners due to replacement of common area non-programmable thermostats with programmable thermostats.

Collaboration Efforts

- The Multifamily program was the first EO program to initiate a collaborative effort with another utility (Consumers Energy). Working together to jointly to serve utility customers with both Consumers Energy (CE) and DTE (DTE) service should maximize customer participation and satisfaction as follows:
- Fewer visits and less disruption to owners and tenants.
- Helps make both programs more attractive to potential customers.
- Increased market reach for both teams.
- Shared learnings among the parties (DTE, Consumers, SEEL and Franklin Energy Services).
- During 2012, 43.7% of all direct install units were accomplished via collaborative efforts.

Lessons Learned

- As the program matures, measure-opportunities decrease as do the remaining untouched property sizes making it more difficult to meet energy savings goals.
- In response to the challenges new measures were added in late 2012, including furnace tune-ups and programmable thermostats.

Spend and Verified Net Savings Results

- DTE Electric spent \$1.7 million on the Multifamily program. This amount was \$0.7 million less than the \$2.4 million plan. The underspend is primarily due to reallocations of funds in the residential portfolio to fund growth in other areas such as the Home Energy Consultation under the Audit & Weatherization program.
- DTE Electric saved 10.9 GWh of verified net energy savings with the Multifamily program. This was 6.3 GWh less than the 17.2 GWh plan.
- DTE Gas spent \$0.6 million on the Multifamily program as planned.
- DTE Gas saved 49.1 MMcf of verified net energy savings. This was 14.3 MMcf more than the 34.8 MMcf plan.

Chart 15 summarizes the 2012 DTE Electric and DTE Gas spend and verified net savings results for the program.

Program Participation

 Low-income segment customer participation was not counted in the 2012 numbers resulting in a lower reported participation number than in previous years.

Chart 16 summarizes the number of customers who have participated in the program (excludes the low-income Multifamily units for 2012).

Program Outlook

• Spending and savings targets are expected to remain flat for 2013 through 2015.

Chart 17 summarizes the spending and savings projections.

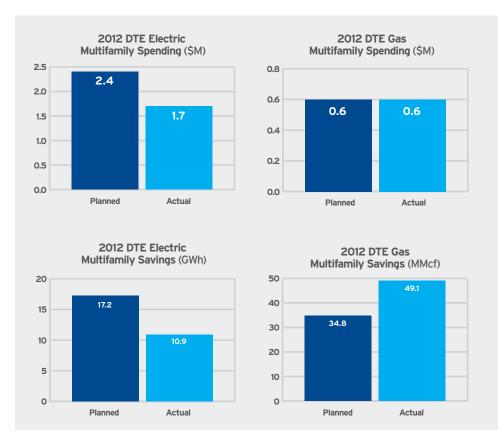


Chart 15 – Multifamily Spending and Verified Net Savings



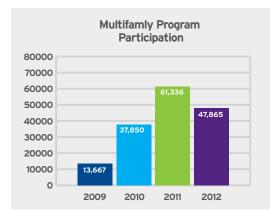


Chart 16 - Multifamily Program Participation



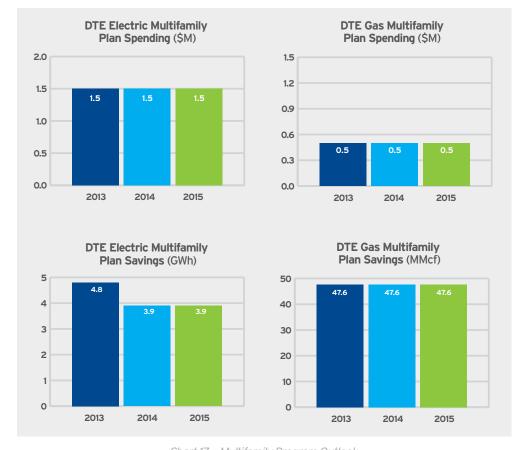


Chart 17 - Multifamily Program Outlook

ENERGY EFFICIENCY ASSISTANCE (EEA) PROGRAM

(LOW-INCOME QUALIFIED PROGRAM – DTE ELECTRIC AND DTE GAS)

Program Description

The objective of the residential Energy Efficiency Assistance (low-income) program was to provide recommendations, financial assistance and education to incomequalified DTE customers and assist them in reducing their energy use and managing their utility costs. The program leveraged the services provided by member agencies of the Michigan Community Action Agency Association (MCAAA), municipalities, counties, public housing commissions, faith-based institutions, community development corporations and nonprofit organizations with existing housing and energy programs. This vast network of participating organizations not only offers comprehensive assistance, but also assists DTE in identifying incomequalified customers. The residential low-income program also was designed to include customers residing in designated low-income multifamily units.

DTE did not pay incentives directly to its income-qualified customers. The residential low-income program delivered "incentive" funding to these customers through a variety of in-kind services. These services included weatherization, plus the replacement of inefficient refrigerators with ENERGY STAR model refrigerators in single family homes and low-income multifamily tenants, and in-home consultation and installation of energy efficient measures through the Home Energy Consultation (HEC) program for income-qualified customers. In addition, low-cost measures such as CFLs, pipe wrap, energy efficient showerheads and faucet aerators were installed at no cost to low-income multifamily tenants.

Highlights

- The program offers a wide range of whole home, home performance centric energy efficient measures to low-income households.
- Energy efficient measures included CFLs, pipe wrap, energy efficient showerheads, and kitchen and bathroom, attic, wall, band joist and mobile home belly insulation, air sealing, and programmable thermostats.
- In 2012, the program greatly expanded the participating organization network to increase program participation across the state.
- In 2012, several new initiatives were added, including the Furnace Test and Tune-Up/ Replacement program, the Refrigerator Replacement program and the CFL Distribution program.

Challenges

 The Department of Energy's limited Weatherization Plan in 2012 reduced the amount of money available to leverage for the low-income population.

Accomplishments

- Worked with Community Action Agencies to install low cost measures or fund weatherization measures for approximately 3,500 requests.
- Directly installed measures in more than 13,400 low-income multifamily units and performed HEC's in over 12,000 low-income homes.
- Performed furnace test and tunes in 1,277 homes through a network of independent HVAC contractors.
- In 2012, the DTE EEA program in total served approximately 75,000 low-income households
- Quickly developing proficiency in program execution among the expanded network of partners

Collaboration Efforts

- Participated in several groundbreaking collaborative initiatives including the Neighborhood Revitalization Initiative in the City of Detroit, which included DTE, the Community Action Agency network, the City of Detroit Department of Human Services and the State of Michigan Land Bank.
- Participated in the Critical Repair and Weatherization Project, in collaboration with Washtenaw County Office of Community and Economic Development (OCED) and Habitat for Humanity of Huron Valley.

Lessons Learned

• Importance of identifying well trained and experienced participating organizations is critical for success.

Spend and Verified Net Savings Results

- DTE Electric spent \$6.2 million on the Energy Efficiency Assistance program. This amount was equivalent to the planned spend of \$6.3 million.
- DTE Electric saved 21.2 GWh of verified net energy savings. This was 4.1 GWh more than the 17.1 GWh plan.
- DTE Gas spent \$6.0 million on the Energy Efficiency Assistance program. This amount was \$0.5 million higher than the \$5.5 million plan. This was primarily due to the increase in incentive rebates offered at the end of the year, which increased the demand.
- DTE Gas saved 140.4 MMcf of verified net energy savings. This was 80 MMcf more than the 60.4 MMcf plan.

Chart 18 summarizes the spend and verified net savings results, which include the low-income portion of the Multifamily and Home Energy Consultation option.

Program Participation

• Customer participation in the program increased significantly in 2012 as the new outreach efforts took hold.

Chart 19 summarizes the number of customers who participated in the program each year. The numbers include the low-income portion of the Multifamily and in-home consultations.

Program Outlook

- The addition of new partners and delivery systems promises a broader reach for the program going forward. Collaboration with other energy providers proved successful and will be expanded in future years.
- Spending and savings from the program are expected to remain flat beyond 2012.

Chart 20 summarizes the spending and savings projections. The numbers include the low-income portion of Multifamily and HEC Programs.



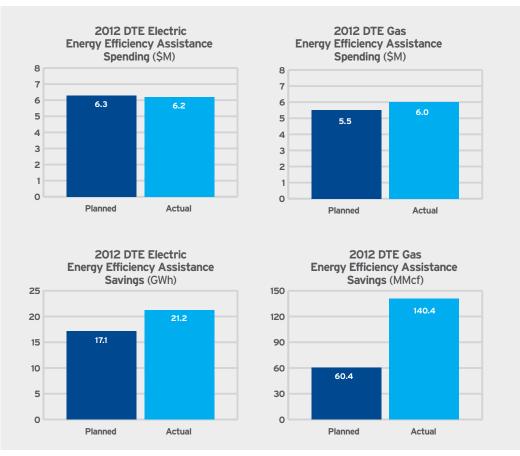


Chart 18 - Energy Efficiency Assistance Spend and Verified Net Savings

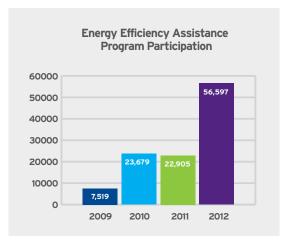


Chart 19 - Energy Efficiency Assistance Program Participation

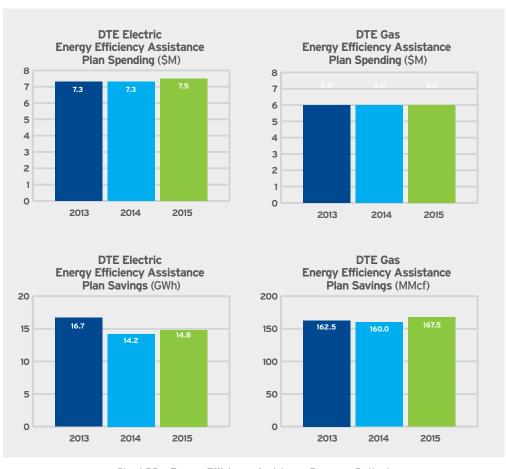


Chart 20 - Energy Efficiency Assistance Program Outlook

ENERGY STAR LIGHTING AND APPLIANCES PROGRAM

(DTE ELECTRIC AND DTE GAS)

Program Description

The objective of the residential and small business ENERGY STAR products program is to increase the awareness and sales of high efficiency ENERGY STAR products among residential and small business customers. The program was designed to spur customer interest by providing educational information and incentives to customers who purchase qualified ENERGY STAR equipment. The primary means used to accomplish this objective were in-store site visits, point-of-purchase material and promotional events that were held throughout the year.

The program helps customers reduce the cost of being energy efficient by providing rebates and or discounts on ENERGY STAR certified products. The certified appliances included clothes washers, dehumidifiers and room air conditioners.

The program also provided upstream discounted compact fluorescent light bulbs (CFLs), light emitting diode (LED) light bulbs, and LED holiday light strings at over 600 retailers, midstream incentives on consumer electronics, and downstream rebates on clothes washers, room air conditioners and dehumidifiers. Programmable thermostat downstream rebates were also provided. Certified consumer electronics included televisions, personal computers and monitors.

Highlights

- DTE Electric offered \$25 rebates for ENERGY STAR qualified clothes washers, dehumidifiers and room air conditioners. Programmable thermostats had a \$10 rebate.
- These rebates were available to customers by mail or online application.

- The appliance downstream program rebated over 10,000 electric and almost 9,000 gas appliances.
- In 2012, a midstream incentive was added for retailers to increase shelf space and inventory of ENERGY STAR consumer electronics such as televisions, computers and monitors.

Challenges

- Discounts per bulb rose from \$1.03 in 2011 to \$1.33 in 2012, in part to make up for price increases from manufacturers because of a shortage of precious metals.
- Gas savings goals are challenging to meet as there are only two cost effective products that produce gas savings: clothes washers and programmable thermostats.

Accomplishments

- DTE sold over 5.7 million CFL bulbs, 70,000 LED bulbs and 89,000 holiday light sets through manufacturer buy-downs at the retailer level and via in-store coupons at small independent hardware stores.
- In addition, over 10,000 applications were processed for qualified ENERGY STAR clothes washers, programmable thermostats, dehumidifiers and room air conditioners.
- Customers are very positive about the program as evidenced by a 92% satisfaction rating in 2012.
- Cycle time, the time from application to the time the customer's rebate check is mailed, was 24 days, which is 20% below the target of 30 days.
- The program participated in over 500 in-store and community events to interact with customers.

Collaboration Efforts

 The program collaborates with local and national retailers such as ACO Hardware, Meijer, Family Dollar, The Home Depot, Lowe's, ACE Hardware, Dollar Tree, Costco, Sam's Club, Wal-Mart, Best Buy, ABC Warehouse and Sears to help our customers become more efficient.

Lessons Learned

- Over half of the gas savings came from sales of programmable thermostats at customer store events where we are able to educate customers in-person on the benefits of installing a programmable thermostat.
- LEDs sell when prices are discounted to \$10.

Spend and Verified Net Savings Results

- DTE Electric spent \$12.1 million on the ENERGY STAR program. This amount was \$1.1 million less than the \$13.2 million plan. This underspend is primarily due to reallocations of funds in the residential portfolio to fund growth in other areas, such as the Home Energy Consultation option under the Audit & Weatherization program.
- DTE Electric saved 201 GWh of verified net energy savings. This was 8.4 GWh less than the 209.4 GWh plan.
- DTE Gas spent \$0.3 million on the ENERGY STAR program. This amount was \$0.1 million higher than the \$0.2 million plan.
- DTE Gas saved 28.7 MMcf of verified net energy savings. This was 14.7 MMcf more than the 14.0 MMcf plan.

Chart 21 summarizes the spend and verified net savings results. The numbers include the ENERGY STAR residential and small business.

Program Participation

• Customer participation in the ENERGY STAR Appliance program has stabilized in 2012.

Chart 22 summarizes the number of customers who have participated in the ENERGY STAR Appliance program.

• Customer participation in the ENERGY STAR Lighting program has also increased consistently.

Chart 23 summarizes the number of ENERGY STAR Lighting products that have been purchased.

Program Outlook

- In 2013, about 1.3 million less CFLs will be discounted due to the portfolio mix, although the number of LED discounts will remain steady.
- Spending is expected to increase slightly beyond 2012, whereas the savings targets are expected to decrease. This decrease is largely due to changes in lighting and appliance standards.

Chart 24 summarizes the spending and savings projections.





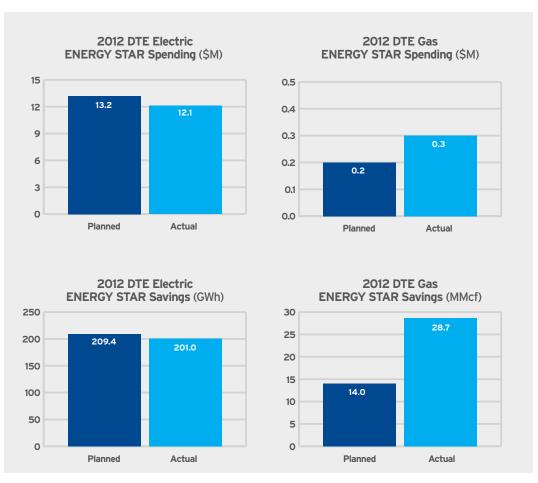


Chart 21 – ENERGY STAR Spend and Verified Net Savings

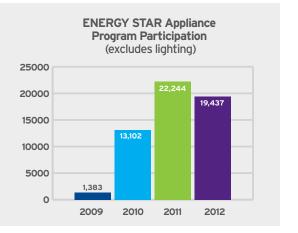


Chart 22 - ENERGY STAR Appliance Program Participation

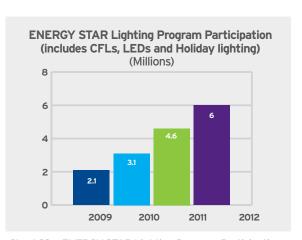


Chart 23 - ENERGY STAR Lighting Program Participation

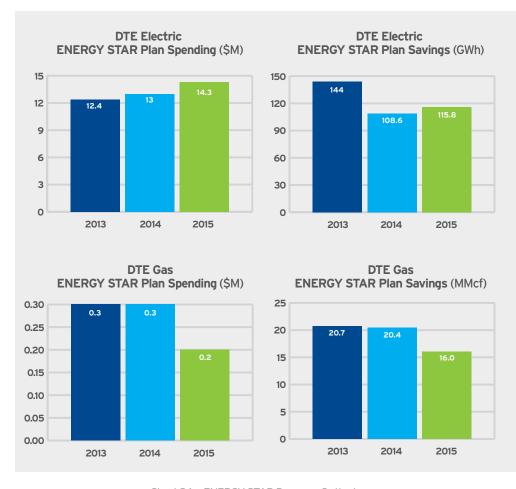


Chart 24 – ENERGY STAR Program Outlook

HEATING, VENTILATION AND AIR CONDITIONING (HVAC) AND WATER HEATING PROGRAM (DTE ELECTRIC AND DTE GAS)

Program Description

The objective of the HVAC and Water Heating program was to increase the demand for energy-efficient heating and cooling equipment and high-efficiency water heating equipment. The electric measures offered in the residential HVAC program included high-efficiency central A/C units, programmable thermostats and Electronically Commutated Motors (ECM). Gas measures included high-efficiency natural gas heating equipment and water heaters. DTE developed and utilized a network of well informed and educated HVAC industry professionals who understand the benefits of and how to sell energy-efficient products.

The program serves residential customers in single- and multi-family dwellings of four units or less who purchase new high-efficiency central air conditioning units, high-efficiency natural gas furnaces or boilers, and/or water heating equipment.

Highlights

- 2012 saw the reintroduction of electric measures to the DTE HVAC measure offering. This was received well by both the homeowner and the participating contractors.
- Electric measures included 15 and 16 SEER air conditioners, Electronically Commutated Motors (ECM), and programmable thermostats used to control air conditioning.
- In 2012 a furnace and boiler test and tune option was added.
- The incentive amounts were \$10 per programmable thermostat unit, \$100 per ECM, \$150 for SEER 15 central A/C units and \$250 for SEER 16+ central A/C units, \$400 for high-efficiency furnaces and \$1,000 for high-efficiency boilers, up to \$100 on high-efficiency water heaters and a \$50 rebate on furnace and boiler diagnostic tests and tuneups.

Challenge

- To maintain participation rates, incentives of high-efficiency furnaces were increased to \$400 in 2012 compared to \$200 in most of 2011, and the incentive on high-efficiency boilers was increased from \$450 to \$1,000. This was done to offset other funding sources expiring such as State of Michigan programs and Federal Tax credits. This resulted in significantly less savings at a higher spend rate.
- Maintaining electric measures funding to support submissions of gas measures at combination DTE Electric and DTE Gas customers where technology impacts both fuels and dual rebates are appropriate is challenging.
- Extended funding allowed us to continue to accept rebate applications for these joint measures, allowing gas applications to continue until the end of the year. This ensured that homeowners received their complete rebate amount for all measures applied for, which promoted homeowner satisfaction

Accomplishments

- DTE continued to leverage its very active trade ally network to maintain the momentum as the program transitioned into 2012.
- Over 7,000 HVAC customer applications were processed.
- The very successful rollout of the new electric measures was a very positive factor for the program.
- Homeowners were very pleased to be able to get rebates for higherefficiency air conditioning systems, and over 1,650 high-efficiency
 air conditioning units were delivered to DTE customers in the 2012
 program year.
- Participants installed a high-efficiency (gas) furnace to achieve the minimum SEER 15 requirement of the program.

Collaboration Efforts

 Meetings were held throughout the state to inform and train the trade ally network. These included rollout training, combustion analysis furnace tune-up training, new contractor training and one-on-one site training with trade allies.

The table below provides a summary of the collaboration efforts.

Event	Number of Events	Attendance
Rollout/contractor training	19	248
Outreach	2	250
Tune-up	3	99
One-on-one onsite	10	52

Lessons Learned

- As tax rebates and tax credits were removed, an increase in incentives was needed to drive the market to participate in purchasing expensive HVAC equipment.
- The 2012 program year started out with a very hot, robust summer in which the trade allies were very busy with A/C installations well into the fall. This caused the fall heating season to be delayed well into late October. Our fall marketing campaign did not roll out until late October, and as a result, there was a lag in consumer response. 2013 marketing will take this into consideration when launching campaigns to ensure that homeowner recognition is awakened early in the season, to ensure that homeowners get a jumpstart on participating in the programs available to them.
- In addition, a continuous campaign of awareness will be facilitated in 2013 to keep DTE HVAC opportunities in front of the homeowner throughout the year.

Spend and Verified Net Savings Results

- DTE Electric spent \$1.0 million on the HVAC and Water Heating program. This amount was \$0.1 million less than the \$1.1 million plan.
- DTE Electric saved 3.3 GWh of verified net energy savings. This was 0.8 GWh more than the 2.5 GWh plan.
- DTE Gas spent \$6.3 million on the HVAC and Water Heating program. This amount was \$2.2 million higher than the \$4.1 million plan, as experienced in the challenges section on page 42.
- DTE Gas saved 225.3 MMcf of verified net energy savings. This was 171.2 MMcf less than the 396.5 MMcf plan.

Chart 25 summarizes the spending and verified net savings results.

Program Participation

• Customer participation in the program has increased steadily since 2009.

Chart 26 summarizes the number of customers who have participated in the program.



Program Outlook

- Because the cost per Mcf saved is higher than other gas energy efficiency programs, DTE is looking at different models that provide other value propositions besides incentives to the customer to encourage participation in the HVAC program.
- A/C measures of 15 and 16 SEER or higher and ECM motors will continue to be offered in the electric service territories of DTE. The electric portion of the HVAC program has been a popular addition and will continue to promote customer satisfaction in the field.
- The program will continue to provide rebates for high-efficiency furnaces, boilers, and water heaters. This will give DTE Gas customers the opportunity to improve the energy efficiency of their homes by installing high-efficiency gas equipment in their homes.
- Spending from the program is expected to increase consistently for DTE Electric while decreasing for DTE Gas beyond 2012. A major unknown factor impacting future gas HVAC programs is the proposed national standards for HVAC equipment, which did not go into effect as expected. This impacts both expected savings and program spend. It is expected that these numbers will be reviewed in 2013.

Chart 27 summarizes the spending and savings projections. The gas savings values presented in the charts were forecast assuming the new furnace standards are implemented.

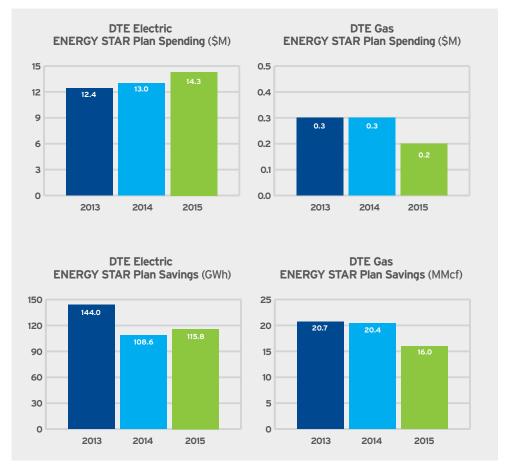


Chart 25 – HVAC and Water Heating Spend and Verified Net Savings



Chart 26 - HVAC and Water Heating Program Participation



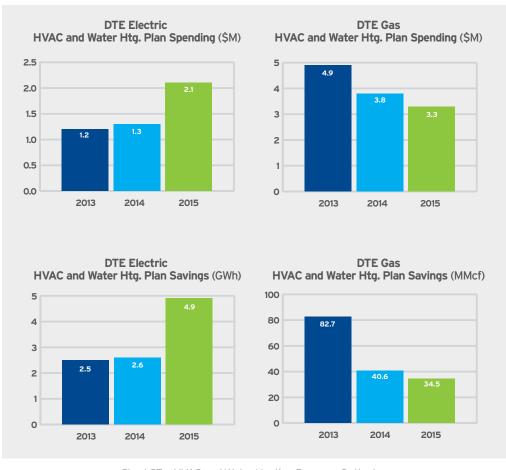


Chart 27 - HVAC and Water Heating Program Outlook

AUDIT & WEATHERIZATION PROGRAM

(DTE ELECTRIC AND DTE GAS)

Program Description

The objective of the residential Audit & Weatherization (A&W) program was two-fold: 1) deliver energy efficiency information to residential customers through various channels including a web-based tool to complete a home energy analysis (where customers can receive a free energy efficiency kit), in-home energy consultations and comprehensive energy audits; and 2) motivate customers by offering rebates for the installation of qualified weatherization measures in their homes.

Enhancements were made to the existing A&W program beginning September 1, 2012. The A&W program was expanded to offer many diverse products and services to DTE customers. Following is a summary of the program offerings:

- Insulation and Windows (INWIN): provides customers a simple pathway to reduce costs through rebates for installing insulation or replacing windows. Customers are able to self-perform or hire any contractor of their choice to complete improvements.
- Home Performance (HP): offers customers a higher tier rebate to
 perform multiple insulation, window and HVAC improvements by
 rewarding them with bonus incentives for completing three or more
 measures. Home Performance customers are required to have a
 certified energy audit performed by a participating contractor listed on
 DTE's website.
- Elementary School education initiative: "THINK! Energy" is an interactive program that provides energy efficiency education that correlates to the Michigan Department of Education math and science academic standards. It was launched to educate elementary school students and help drive awareness and participation at their homes. The target audience consists of 4th and 6th grade students, their

- parents and their teachers. It is open to both public and private schools and provides non-traditional opportunities to raise awareness and adoption of energy efficiency measures.
- Home Energy Consultation (HEC): Offers personalized on-site energy consulting and advice to residents throughout the DTE service territory as well as direct installation of energy-efficient measures in their homes. Key features of HEC are: 1) provide customers with energy efficiency education to help them save energy in their home; 2) explain to customers how to read and understand their utility bills; 3) provide recommendations on ways to make their home more energy efficient; and 4) allow for the direct installation of low-cost measures. This program included outreach activities (door-to-door canvassing, community groups and churches and congregations) to generate customer interest.
- Energy Efficiency Kits: Offers an online home energy assessment tool
 that helps customers to easily evaluate how energy is used in the home
 and where savings can occur. Upon completion of the assessment, the
 customer receives an energy efficiency kit in the mail containing easyto-install energy efficiency measures.

Challenges

Providing a broader set of options for customers to participate in the residential Audit & Weatherization program came with some new challenges.

- Throughout 2012 in the HEC option, there was low participation from the gas customers. Through deeper, more concerted marketing and outreach efforts the participation goals were achieved, with about 60% of the gas customer participation occurring in the 4th quarter.
- As part of the elementary school initiative, signed permission slips need to be obtained to provide energy-efficient measures to students.
 Obtaining these permission slips was found to be a challenge and resulted in conducting an additional 40 presentations to schools to meet the goals.

Highlights

- Numerous enhancements were made to the existing A&W program beginning September 1, 2012.
- Customers who completed a comprehensive energy audit were paid higher rebates for weatherization measures than those who did not complete an audit, subject to specific rebate caps. Those who participated in the home performance program were also offered the new multi-measure bonus incentive. The amount of the bonus incentive equaled \$150 for 3 qualifying measures, \$200 for 4–6 measures and \$300 for 7+ measures.
- DTE mailed over 16,000 "My Energy Analyzer" kits, processed slightly over 3,000 weatherization rebate applications, and completed approximately 37,700 home energy consultations.
- In 2012 there were over 31,000 HECs completed throughout the DTE service territory. These include approximately 20,800 gas/electric combination customers, 5,900 electric-only customers and 4,500 gas-only customers. Approximately 40% of the HEC customers were classified as low-income.
- In 2012, 180 schools, 20,824 students and 708 teachers participated.
- Exceeded both gas and electric goals within budget.
- Developed collaborative efforts to work with Consumers Energy in 2013 for both HEC and School programs.

Accomplishments

- DTE simplified the process for the customer by dividing the previous A&W program into two paths with separate application forms to ensure that customers understood which rebates they qualified for.
- More than 40 contractors were trained and enrolled into the HP program. Nearly 70% of customers who participated through the HP

- program performed three or more energy-efficient improvements to their home. Availability of the multiple-measure customer bonuses contributed to this accomplishment.
- An online questionnaire was developed and posted on DTE's website
 for customers to answer questions about their home to receive a free
 energy efficiency kit. This questionnaire was simpler for customers to
 find and use than the DTE website tool My Energy Analyzer. We were
 able to successfully market this new tool to customers through email
 blast campaigns and experienced nearly a 5% response rate.
- The HEC option was a major contributor to the Neighborhood Energy Efficiency Day by completing over 144 HECs for low-income customers in one day in a single neighborhood, exceeding the goal by 15%.
- The HEC options' outreach efforts also supported all of the DTE Customer Assistance Days and many resource fairs, as well as partnerships with multitudes of other community groups and religious organizations.
- Success of Schools option resulted in a 2013 waiting list as word-ofmouth promotion resulted in schools contacting DTE to register for the program.

Collaboration Efforts

- With the INWIN and HP options, customer outreach was performed through attending events with organizations such as Comerica Bank, General Dynamics, Michigan Association of Realtors and Better Buildings for Michigan.
- INWIN and HP options also held contractor training events, which
 were held in Dearborn and Grand Rapids. Contractor training was
 also performed via webinar for those who were not able to attend the
 onsite events.

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- The HEC program began collaboration efforts with Consumers
 Energy by planning a pilot to jointly offer HEC type service to shared
 customers. Consumers Energy currently offers a very similar service to
 its customers. It is anticipated the partnering with Consumers Energy
 will facilitate a better experience for shared customers by providing the
 installation of all measures in a single visit, while improving the cost
 effectiveness of the program.
- The Schools option established a collaborative with Consumers
 Energy that will commence in 2013 and will result in less disruption to
 students and teachers, increase market exposure for both utilities, and
 make both programs more attractive to participants.

Lessons Learned

- An email marketing campaign proved to be very effective in the marketing of energy efficiency kits. Customers qualified for the kit after the completion of an online survey. Previous campaigns using print or postcards were not nearly as effective.
- The HEC option was able to use existing marketing and outreach levers, which were effective in spurring or slowing the market as needed. Outreach efforts help to establish relationships with various organizations in an effort to gain program participation.
- In the Schools option in the spring of 2013 program, permission slips will be collected at the presentation to cut down on administrative labor. This is expected to eliminate multiple permission slip requests to teachers.
- The Schools option also found that changing the name of the at-home educational tool from "Household Report Card" to "Household Worksheet" minimized parental concerns that DTE may be "reporting" on their energy usage.

Spend and Verified Net Savings Results

• DTE Electric spent \$5.0 million on the Audit & Weatherization program. This amount was \$4.0 million higher than the \$1.0 million plan, largely resulting from customer demand for the in-home energy consultations and the newly launched school education option.

- DTE Electric saved 17.7 GWh of verified net energy savings. This was 7.7 GWh more than the 10.0 GWh plan.
- DTE Gas spent \$4.8 million on the Audit & Weatherization program. This amount was \$2.1 million less than the \$6.9 plan.
- DTE Gas saved 200.8 MMcf of verified net energy savings. This was 14.2 MMcf less than the 214.6 MMcf plan.

Chart 28 summarizes the spending and verified net savings results. The numbers provided do not include the low-income portion of the Home Energy Consultation option.

Chart 29 is a summary of the spending and verified net energy savings achieved by each A&W option in 2012.

Chart 30 summarizes the number of customers participating in the A&W options in 2012.

Program Participation

 The number of participants decreased slightly in 2012 compared to 2011 primarily due to restructuring of the residential program portfolio and the introduction of new programs, such as the Home Energy Consultation option.

Chart 31 summarizes the number of customers who have participated in the A&W program.

Program Outlook

- Moving forward, the A&W program will be divided into separate programs as follows: Energy Efficiency Kits, Insulation and Windows, Home Performance, Schools, and Home Energy Consultation.
- The Home Performance program is exploring the possibility of expanding the program to electric customers who have central air conditioning, adding additional electric measures such as high SEER air conditioners and air conditioner tune-ups. DTE is working on a pilot evaluating an HP program that has a zero incentive model to encourage multiple-measure installations with value prepositions other than incentives.

- The HEC program is looking to complete another 30,000 HEC across the DTE service territory in 2013, while leveraging the HEC's high quality customer touch to create continuing customer engagement through a customized HEC savings plan available on the DTE website.
- DTE Electric spending and savings are expected to stay flat beyond 2012. For DTE Gas, spending and savings are projected to increase steadily.

Chart 32 summarizes the spending and savings projections beyond 2012.

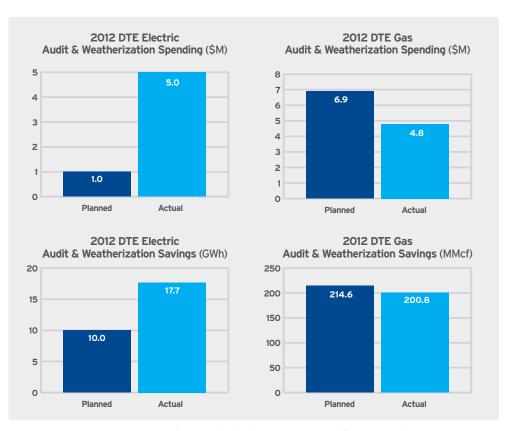


Chart 28 – Audit & Weatherization Spend and Verified Net Savings

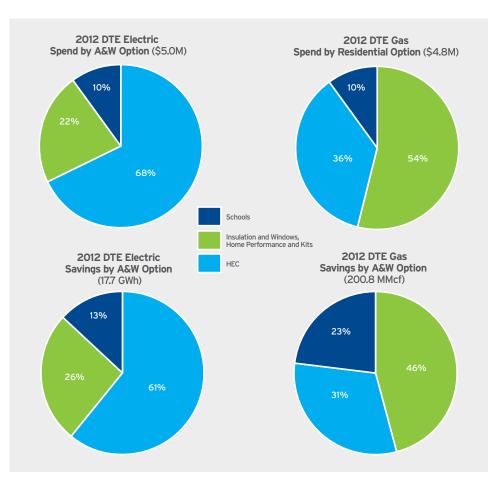


Chart 29 - Audit & Weatherization Spend and Verified Energy Savings by Program

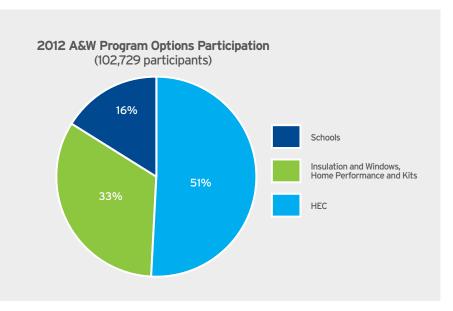


Chart 30 - Audit & Weatherization Program Participants by Option



Chart 31 - Audit & Weatherization Program Participation

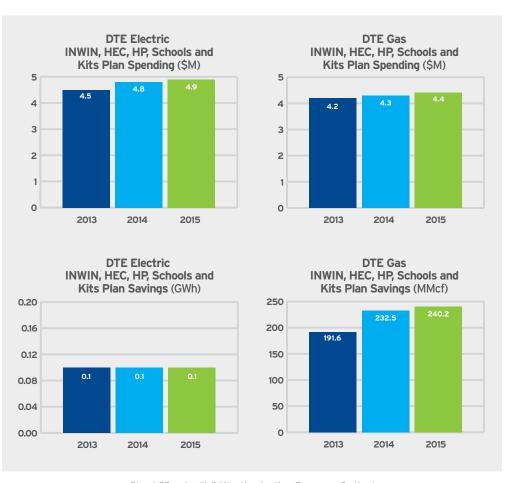


Chart 32 - Audit & Weatherization Program Outlook



COMMERCIAL & INDUSTRIAL (C&I) PROGRAMS

The goal of C&I programs is to provide incentives to customers to encourage them to install more energy-efficient equipment to reduce overall energy consumption and save money on their energy bills. DTE customers can take advantage of incentives for energy-efficient upgrades tailored to reduce energy used in their business, improving their bottom line. The C&I EO programs offer customers incentives to replace existing equipment and fixtures with new energy-efficient equipment and incentives for designing and building new and/or remodeling projects that are energy efficient.

There are two main C&I incentive programs: C&I Prescriptive and C&I Non-Prescriptive. Both aim to influence customers to purchase and install equipment of higher efficiency than they would likely do otherwise. DTE Commercial and Industrial customers are able to apply for energy efficiency incentives under these programs.

DTE used the same Implementation Contractor (IC) in 2012 that was used to implement the C&I EO programs in 2009 - 2011, DNV KEMA Services Inc., who is currently providing operational support including application review and processing, rebate fulfillment, call center operations and tracking of results, and customer satisfaction surveys for the program. DTE Account Managers who are responsible for business relationships with assigned C&I accounts, Energy Partnership & Services' Energy Managers, and trade allies who market energy efficiency technology directly to customers were the key marketing channels. Other materials and mechanisms used to educate and drive awareness were the DTE website, training seminars, technical support, press and periodicals. Throughout the year, program presentations were made to customers; associations/organizations; city, state and federal government agencies; and vendors, contractors, engineering and architecture firms.

To encourage an equitable distribution of funds among as many DTE customers as possible, incentives are subject to annual limits or caps. These caps were set per facility per year at \$150,000 for electric customers and \$100,000 for natural gas customers. The caps per project were \$150,000 for electric and \$25,000 for gas. Customers with multiple facilities could receive payments up to the cap for each facility, but not more than \$500,000 per customer for electric customers and \$100,000 for natural gas customers within a single program year. **Table 6** below displays the program year incentive limits. Actual payments per facility determine incentive limits regardless of whether the incentive is paid directly to the customer or to an intermediate party, such as the contractor performing the service for the customer.

	Electric	Gas
Facility	\$150,000	\$100,000
Customer	\$500,000	\$100,000
Project	\$150,000	\$25,000

Table 6 – 2012 C&I Incentive Caps

The prescriptive program application outlines incentive payments for applicable measures. Prescriptive incentives can include both the cost of the measure and labor required to install the measure. For custom projects, project incentives cannot exceed 50% of the total custom project cost to purchase and/or install the eligible energy efficiency measure(s). The project cap applies to the entire project.

Several proactive specials were launched in 2012 to create broader general customer participation. These included the promotion of direct install thermostats, boiler tune-ups and stream traps, and a T12 lighting retrofit program; the launch of the Express program; and both a trade ally bonus and gift card promotion

In 2012, EO C&I programs performed well. In total, the EO C&I programs achieved 255.6 GWh of verified net electric savings, which is 95% of the 267.8 GWh plan, and 721.2 MMcf of verified net gas savings, which is 134% of the 536.8 MMcf plan. Chart 33 summarizes the electric and gas spending, and verified net energy savings for the entire 2012 EO C&I programs.

Chart 34 is a summary of the spending and verified net energy savings achieved by each EO C&I program in 2012 with the following assumptions:

- DTE Electric includes spend and verified savings for the Self-Direct program.
- DTE Gas does not include spend or savings for Self-Direct as this was a DTE Electric-only program.

The C&I programs received high customer satisfaction scores in 2012 with 94% of customers responding with "satisfied" or "extremely satisfied" ratings. In 2012, more than 12,400 customers participated in the EO C&I program. Chart 35 summarizes the number of customers participating in each of the EO program categories.

Following are descriptions of the Commercial & Industrial Prescriptive and Non-Prescriptive Programs and how they performed in 2012.

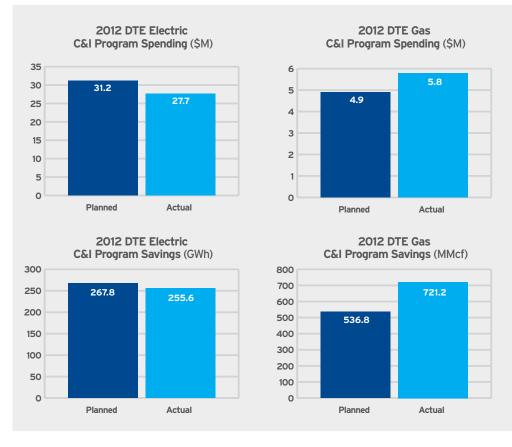


Chart 33 – 2012 C&I Program Spending and Verified Net Savings

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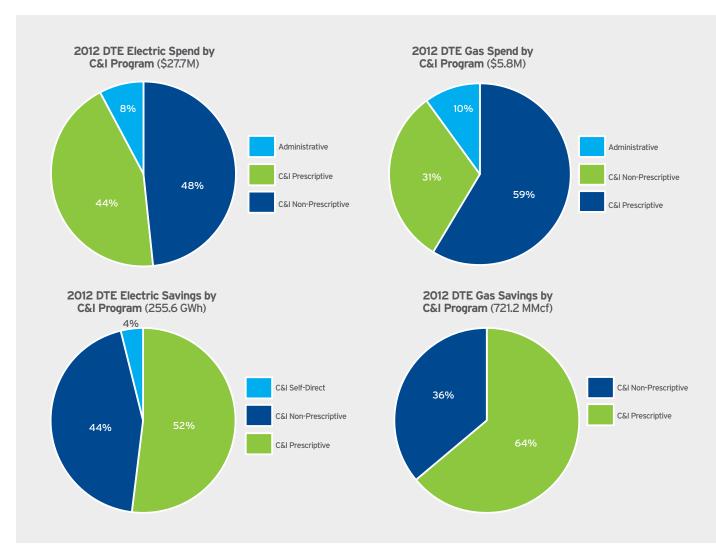


Chart 34 - 2012 C&I Spending and Verified Net Savings by Program

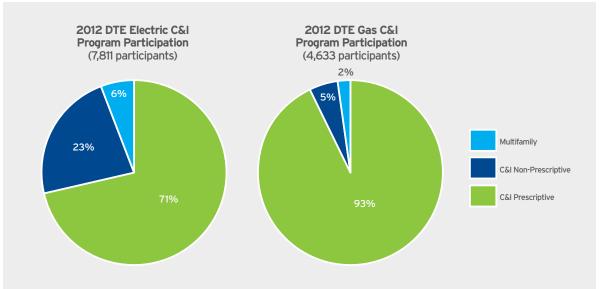


Chart 35 - C&I Program Participation

COMMERCIAL & INDUSTRIAL PRESCRIPTIVE PROGRAM

(DTE ELECTRIC AND DTE GAS)

Program Description

The objective of the C&I Prescriptive program was to provide predetermined measures and incentives to C&I customers for the installation of energy-efficient equipment. These incentives were designed to encourage commercial and industrial business customers to install energy-efficient measures in existing facilities in an effort to reduce overall energy consumption and save money on their energy bills.

C&I Prescriptive categories provide pre-determined incentives to C&I customers for the installation of energy-efficient equipment for numerous applications, including, but not limited to: lighting, controls, HVAC, refrigeration and food service equipment. Incentives apply to qualified equipment commonly installed in a retrofit or equipment-replacement project and are paid based on the quantity, size and efficiency of the technology installed. Prescriptive incentives take the form of cash rebates paid after the installation of eligible measures.

The C&I Prescriptive program included more than 400 prescriptive measures. The primary measures implemented include lighting fixtures, lamps and controls, motors and variable-speed drives, food service and refrigeration equipment, air conditioning and ventilation equipment and other common energy-efficient equipment.

Additionally, the Multifamily program has a C&I Prescriptive component. Energy savings and costs for measures installed in the common areas of multifamily dwellings are included in the C&I Prescriptive program. Property owners were encouraged and provided incentives to install energy-efficient equipment in the common areas (e.g., hallways, stairwells and parking lots) of their building(s). Examples of common area measures implemented during 2012 include T-8 lighting fixtures, parking lot lighting and LED exit signs.

Highlights

DTE Electric

- Retrofit program offered more than 400 electric prescriptive measures in addition to its custom measures.
- Prescriptive measures generated 52% of electric savings in 2012.
 The largest savings came from high-intensity discharge (HID) lamps to fluorescent retrofits and upgrades to existing fluorescent lighting.
 These two measures alone provided more than 50% of the prescriptive savings. As a category, lighting combined to provide 70% of the savings within the Prescriptive electric program. This pattern is typical of the last several years.

DTE Gas

- HVAC controls (thermostats, energy management systems and demand control ventilation) accounted for almost 60% of gas savings for combined Prescriptive and Non-Prescriptive programs.
- The greatest prescriptive savings came from HVAC controls, which provided more than 50% of the program's prescriptive gas savings.
- Boiler tune-ups and steam trap replacement made up approximately 21% of the savings.
- The greatest MCF savings came from manufacturing, schools and services.

Challenges

- Penetrating the multifamily market with EO programs is challenging since decision-makers for these properties are often hesitant to invest in energy efficiency measures when the benefits are shared among the tenants and property owners, but the investment is wholly made by the owner. However, installing energy-efficient measures as an investment helps multifamily property owners and managers enhance the value and marketability of their properties while reducing their energyrelated operating expenses.
- Throughout the year, a natural fallout of applications occurs as projects are not completed, customers cancel their applications or no longer qualify.
- Decreased demand for the program compared to the first three years, which was not recognized until the second quarter.
- The average energy savings per application decreased, resulting in more applications required to reach goal.
- Smaller business customers require different strategies and tactics than larger Commercial & Industrial customers.
- Many small businesses don't own the building they operate out of, giving little incentive for participation.
- Small business owners are not familiar with the components of the DTE EO program.

Accomplishments

 The Express program completed 203 applications with small businesses saving 8,087 MWh. This program is specially designed to reach small businesses with an incentive retrofit program that would be attractive to this widespread market. The program is promoted by independent, licensed contractors who have been pre-selected and trained in the program.

- A collaboration with Consumers Energy on thermostats yielded electric savings from 973 thermostats.
- Realized 35% more savings than originally planned on T12 lighting special offer.
- Realized over 194,000 MCF gas savings from the installation of over 7,880 programmable thermostats.

Collaboration Efforts

- Shared thermostat savings with Consumers Energy through a new collaborative effort launched in September 2012.
- Worked to promote energy efficiency with Michigan Saves by co-presenting at events, and sharing materials with customers.
- DNV KEMA is the Implementation Contractor (IC) for the main C&I program, Thermostat program, Energy Opportunity Assessments (EOA) and Technical Sessions.

Lessons Learned

- Past performance of the energy efficiency program may not be a good predictor of future performance as lighting measures have been driving past success.
- Small business customers are receptive to learning about the benefits of EO measures.
- Direct Install programs can be effective in increasing participation with small business customers.
- A portfolio of different programs/products is needed to effectively penetrate the small business community.
- Touching the largest number of small businesses will require a comprehensive strategy that includes a digital focus.

DTE Gas

C&I Prescriptive Plan Spending (\$M)

Spend and Verified Net Savings Results

DTE Electric

- DTE Electric spent \$12.2 million on the C&I Prescriptive program. This amount was \$3.1 million less than the \$15.3 million plan. This underspend is primarily due to customer savings per application being slightly higher than expected and the project incentive caps limiting the incentive dollars a customer could receive.
- DTE Electric saved 133.1 GWh of verified net energy savings. This was 24.3 GWh less than 157.4 GWh plan.
- DTE Electric also spent \$1.3 million on the C&I component of Multifamily program. This spend includes common area measures only. DTE Electric saved approximately 4.5 GWh under the Multifamily program, which is included in the C&I Prescriptive program energy savings.

DTE Gas

- DTE Gas spent \$3.4 million on the C&I Prescriptive program. This amount was \$0.3 million higher than the \$3.1 million plan. This overspend is due to our increased efforts to promote the program to more small and medium customers.
- DTE Gas saved 464.4 MMcf of verified net energy savings. This was 85.7 MMcf more than 378.7 MMcf plan.

Chart 36 summarizes the spending and verified net savings results for the DTE C&I Prescriptive program and includes the C&I portion of the Multifamily program.

Program Participation

- There were 5,577 customer applications in 2012 for the electric C&I Prescriptive program and an additional 446 Multifamily applications.
- The gas C&I Prescriptive program had 4,311 customer applications and an additional 92 Multifamily applications.

Chart 37 summarizes the number of customers who have participated in the program.

Program Outlook

- DTE Electric savings are expected to remain flat.
- Program plan is to launch more special offers earlier and more often in 2013 to keep current customers engaged and interested in the program, as well as attracting new customers to participate in the Energy Efficiency Program for Business.

Chart 38 summarizes the spending and savings projections. Numbers in the charts include C&I portions from the Multifamily program

When C&I customers cannot find a prescriptive measure that fits their projects, they can apply for non-prescriptive custom measures. Following is a description of the C&I Non-Prescriptive program.

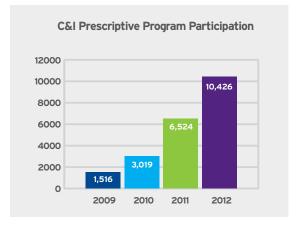
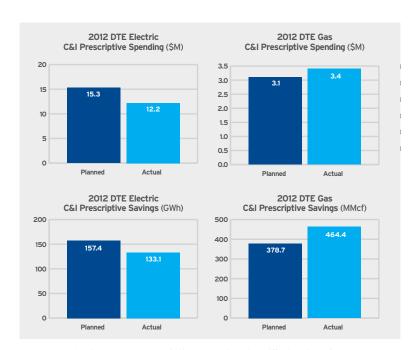


Chart 37 - C&I Prescriptive Program Participation



2014 2013 2015 2014 DTE Electric **DTE Gas** C&I Prescriptive Plan Savings (GWh) C&I Prescriptive Plan Savings (MMcf) 300 250 200 150 60 100 30 50

DTE Electric

C&I Prescriptive Plan Spending (\$M)

2013

2014

2015

Chart 38 – C&I Prescriptive Program Outlook

2013

2014 2015

COMMERCIAL & INDUSTRIAL NON-PRESCRIPTIVE PROGRAM (DTE ELECTRIC AND DTE GAS)

Program Description

The C&I Non-Prescriptive program promotes the installation of energy-efficient technologies among DTE's commercial and industrial customers. The program provides incentives to customers for measures installed in qualified projects that are less common or more complex than the Prescriptive measures.

As with Prescriptive incentives, custom incentive payment occurs after the equipment is installed and operational at the customer's location.

The objective of the C&I Non-Prescriptive program is to provide custom incentives to C&I customers for the installation of innovative and unique energy efficiency equipment and controls that decrease the consumption of electricity or gas.

Examples of C&I Non-Prescriptive program measures implemented during 2012 include energy management system controls on condenser and chilled water pumps; cooling tower replacement with energy-efficient motors and variable frequency drives; Demand Control Ventilation (DCV) mechanical systems and custom lighting projects.

Measures that were not eligible for an incentive include fuel switching (e.g., electric to gas or gas to electric), changes in operational and/or maintenance practices or simple control modifications not involving capital costs, on-site electricity generation, projects that involve peak-shifting and not kWh savings, projects involving renewable energy and projects in which the payback did not meet the C&I Non-Prescriptive requirements.

Measure incentives were based on the first 12-month estimated energy savings times \$0.08 per kilowatt-hour. To qualify for the incentive, projects required a one-year minimum and an eight-year maximum simple project payback. Additionally, incentives were capped at 50% of project cost.

Highlights

DTE Electric

- Accomplished over 24GWh of savings through the Large Electric Special Offer. This limited-time program provided for up to a million dollars of incentives for larger scale projects with higher capital investment.
- An Energy Opportunity Assessment (EOA) was available to DTE small business customers ready to take a first step to becoming more energy efficient. The program provides a 1-page cursory walk-through to identify older inefficient technologies that if upgraded would save energy. Leads are generated for other DTE EO programs. In 2012, the target was 2,400 completed assessments; 2,627 were completed.
- Technical Training Sessions were available to DTE customer groups throughout the calendar year 2012. The sessions were focused on specific market segments (schools, grocery stores, restaurants, etc.) and the energy technologies that pertain to that segment. Customers attend at no cost. In 2012, the target was 1,200 participants; 1,600 participants actually attended these technical training sessions.

DTE Gas

- The DTE Gas program achieved both the energy savings and incentive spend objectives.
- Established a boiler tune-up and steam trap replacement bonus that was paid to contractors in an effort to stimulate participation in the gas program.
- Offered incentives to promote steam trap surveys. We developed this
 program to promote future participation in the trap replacement program.
 Launched a Large Gas program offering to all business gas customers.
 The Large Gas program offered customers an additional 25% increase
 in the incentive amount and required the installation of the equipment
 by June of 2012.

Challenges

- With Large Gas customers, larger incentive amounts are required to achieve a reasonable rate of return for the customer to even consider making the improvements.
- Large industrial customers struggle to shift gears as new specials are introduced into the market place.

Accomplishments

- Secured over 85.7 MMcf of additional gas savings (above target).
- 46 customers participated in the boiler tune-up and steam replacement offering.
- Attended monthly DTE Account Manager meetings to provide energy efficiency program updates and to promote new program offerings to the Company's largest customers.
- As a result of the T-12 limited-time offer, we received 540 applications, accounting for 34,352,126 in kWh savings and \$2.27 million in incentives.

Collaboration Efforts

- Implemented the Designated Trade Ally program. Any trade ally
 who attended a program training session received the classification
 as a Designated Trade Ally. Under this program, the trade ally would
 receive direct communications throughout the year about various
 program offerings.
- Shared outreach and direct install leads with other utilities in the state.
- Worked closely with "Michigan Saves" to help offer businesses viable low-interest financing of energy efficiency projects.

Lessons Learned

- Customers will always be looking for "a deal"; therefore, special programs and limited-time offers will continue to generate interest and participation.
- Although the program had a limited-time offer to replace T12 lights since incentives would change in 2013, customers were surprised when the change happened.
- Increased incentive caps for gas customers will attract large industrial customers.
- Account Managers are a valuable resource in identifying large projects in SE Michigan and upper Michigan.

Spend and Verified Net Savings Results

DTE Electric

- DTE Electric spent \$13.4 million on the C&I Non-Prescriptive program. This amount was \$0.9 million higher than the \$12.5 million plan. This overspend is primarily due to increased incentive amounts to entice greater participation in the 3rd and 4th quarter to achieve savings targets.
- DTE Electric saved 113.0 GWh of verified net energy savings. This was 35.8 GWh more than the 77.2 GWh plan.

DTE Gas

- DTE Gas spent \$1.8 million on the C&I Non-Prescriptive program. This amount was \$0.5 million higher than the \$1.3 million plan. This overspend is due to increased incentive amounts to increase program participation in the 1st quarter to achieve saving targets.
- DTE Gas saved 256.8 MMcf of verified net energy savings. This was 98.7 MMcf more than the 158.2 MMcf plan.

Chart 39 summarizes the spending and verified net savings results.

Program Participation

- C&I Non-Prescriptive program participation has increased steadily since 2009. In 2012, the participation more than doubled compared to 2011 due to restructuring of program offerings.
- There were 1,788 DTE Electric customer applications in 2012 for the C&I Non-Prescriptive program. The DTE Gas C&I Non-Prescriptive program had 230 customer applications.

Chart 40 summarizes the C&I Non-Prescriptive program participation.

Program Outlook

- For 2013 and the foreseeable future the energy efficiency program for business will keep pace with forecasted budgets for energy savings.
- Strong, and now long-standing, relationships with the contractor and business community at a variety of levels will keep the program going with continued interest, deeper savings and behavioral transformation.

Chart 41 summarizes the spending and savings projections.

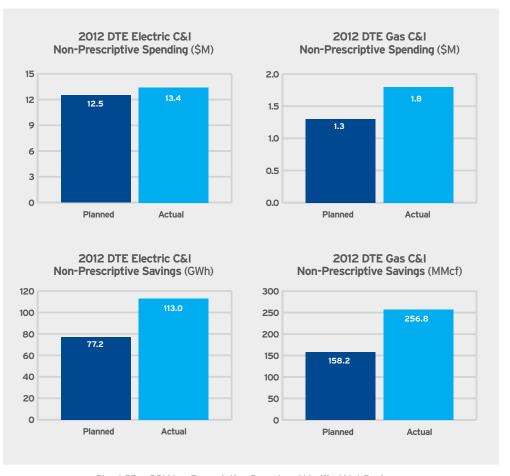


Chart 39 - C&I Non-Prescriptive Spend and Verified Net Savings

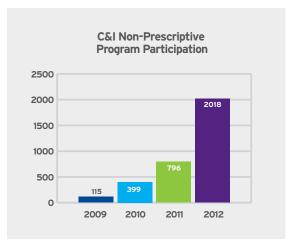


Chart 40 - C&I Non-Prescriptive Program Participation



Chart 41 – C&I Non-Prescriptive Program Outlook

COMMERCIAL & INDUSTRIAL SELF-DIRECT PROGRAM

(DTE ELECTRIC)

Program Description

Through 2012 only large Electric C&I customers were able to choose to self-direct and implement their own EO plan. A similar self-direct option for the largest gas C&I customers began in 2013, but no customers applied for 2013. The main features of either Self-Direct program are similar. Customers who choose to self-direct are exempt from the mandatory EO electric surcharge(s), with the exception of a portion of the surcharge that funds the low-income programs as well as the associated cost to administer the program.

For the 2012 program, DTE Electric placed a bill message on all commercial customer bills notifying them about the program and how to subscribe to the program. All existing self-directed customers were sent personalized letters to inform them it was time to re-apply. Account managers followed up with a phone call after the letters were sent out to address customer questions. The program information was also placed on the DTE website along with the required energy plan templates for customers to apply to the program.

Highlights

- Available to non-residential electric-only customers with a satisfactory bill payment history.
- Annual peak demand of 1 megawatt (MW) or greater per single site or annual peak demand of 5 MW or greater per aggregated sites of customers.
- Cannot include sites or accounts in a Self-Direct plan that have received an EO rebate or incentive from an electric provider and are within the calculated waiting period.

- The waiting period in months is equal to the total rebate amount divided by the current month's EO surcharge.
- If the waiting period will lapse after the Self-Direct plan filing deadline, but before the Self-Direct plan year begins on January 1, a customer may include those sites or accounts during the upcoming plan period.
- Self-Direct customers determined their energy reductions by multiplying their annual consumption by the percentage factor specified in PA 295. The designated energy savings factor for 2012 was 1.0%.

Challenges

• Communicating the program requirements to the applicable customers so that those who qualify can enroll.

Accomplishments

• Five of the seven customers reported that they achieved or exceeded their energy saving goals for the annual reporting period.

Collaboration Efforts

• Collaboratively worked with Consumers Energy on the reporting requirements to ensure program consistency.

Lessons Learned

• A majority of the customers adhere to the program requirements, submitting plans and annual reports.

Spend and Verified Net Savings Results

The cost to administer the Self-Direct program for 2012 was \$50,400 for DTE Electric. These costs are included in the C&I Prescriptive program costs above and shown separately in **Chart 42**.

DTE Electric

- DTE Electric spent \$0.05 million on the C&I Self-Direct program. This
 amount was \$0.03 million higher than the \$0.02 million plan. This
 overspend is primarily due to increased administrative costs to manage
 the program.
- DTE Electric saved 9.5 GWh of verified net energy savings. This was 23.8 GWh less than the 33.3 GWh plan because only seven customers participated in 2012.
- During the subscription period for 2012, no additional customers applied to self-direct. Therefore, DTE Electric had seven customers who chose to self-direct their own EO plan during 2012.
- As a result, at the beginning of 2012, DTE adjusted the projected MWh for the 2012 Self-Direct planned energy savings from the 33,250 MWh reflected in the Amended EO Plan, to 9,535 MWh.

Chart 42 summarizes the spend and verified net savings results.

DTE Gas

• DTE Gas spending and savings are not applicable for the C&I Self-Direct program.

Program Participation

Chart 43 summarizes the C&I Self-Direct program participation.

Program Outlook

 Based on current participation, it is anticipated that the program will continue to have approximately 6–7 customers participate in the program.

Spending and savings targets for the DTE Electric C&I Self-Direct program are displayed in **Chart 44**.

• The newly offered DTE Gas Self-Direct program did not have customers apply for 2013, so the projected spend and savings are zero.



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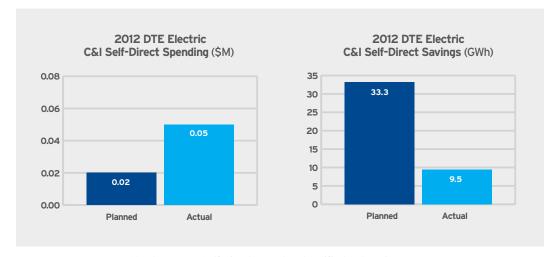


Chart 42 - C&I Self-Direct Spend and Verified Net Savings

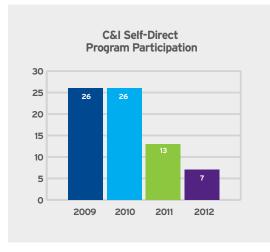


Chart 43 - C&I Self-Direct Program Participation

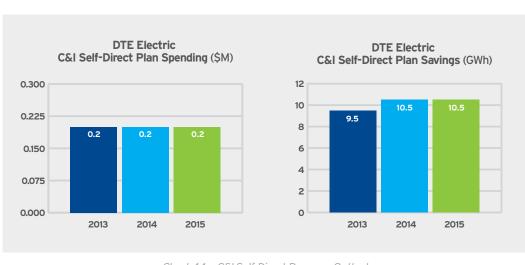


Chart 44 - C&I Self-Direct Program Outlook

EDUCATION AND AWARENESS (E&A) PROGRAM

Program Description

The objective of the EO E&A program is to make DTE customers aware of the opportunities to save energy and to reduce energy costs through actions that they can take. A secondary objective is to make customers aware of DTE's website and other social media, which provide channels for customers to engage in specific EO programs offered.

Highlights

In 2012, a large number of projects and campaigns were implemented to continue to raise DTE customer awareness of energy efficiency and opportunities to participate in the EO programs. Key campaigns / initiatives conducted in 2012 are as follows:

- Residential campaigns (includes radio, print and digital ads).
- Small business campaign (Project Believe for Business).
- Contests and promotions (grocery store contest, video contests).
- Events and sponsorships (sports sponsorships—Red Wings, Pistons, Lions, Whitecaps and partnerships—and Twelve Oaks Mall, schools outreach,).
- Employee outreach (Take the Challenge energy savings competition, company website scavenger hunt, monthly and daily newsletters).

New collateral was created such as brochures, trinkets, shade banners, ambassador cards, energy-saving handouts etc. in an effort to make customers aware of energy efficiency. In addition, tools and resources (calculators, targeted and bilingual videos, DVDs, social media communities, bill inserts, direct mail postcards, email newsletters, blogs, tips, website information) were developed. Customers took action by making behavioral changes, taking advantage of low-cost/no-cost tips, and participating in DTE's EO programs.

2012 was a year of change for the E&A program. Our strategic efforts to raise awareness and customer satisfaction have resulted in the creation of new and improved tactics and tools and resources that have been impactful for all three customer segments - residential, business and employees.

Challenges

- In 2012, the team was challenged to replicate the success of the residential campaign for business customers by raising their awareness of and satisfaction with DTE's energy efficiency actions. The team was able to meet this challenge by developing a new campaign called Project Believe—Business for small business customers.
- The team continued to perform rapid experimentation to try new ways to educate customers. The challenge is to make sure enhancements are made to existing tactics and incorporate new tactics by conducting research to make sure that the tactics have produced the desired impact.
- Event marketing presence needs to be improved significantly. Managing event marketing logistics could be challenging, particularly with event staffing and coordination.
- Our sponsorship with the Detroit Red Wings had to be renegotiated due to an NHL labor dispute. The contract was modified so that DTE was not affected monetarily due to a shortened season and the loss of exposure.

Accomplishments

2012 was a very successful year for the E&A team as we were able to execute our annual campaign within the allocated budget and resources, while exceeding the targets on several key metrics.

• The program resulted in over 4.6 million meaningful interactions with our customers.

- The program received the 2012 Inspiring Efficiency Award in Marketing from the Midwest Energy Efficiency Alliance.
- The team launched several new initiatives:
- Created new interactive display for event marketing.
- Collaborated with a new digital communications vendor.
- Enhanced our sports sponsorship with the Detroit Lions.
- Laid the groundwork for a new sports sponsorship with the Detroit Pistons.
- Launched new Lighting Advisor for small business customers to help them make informed lighting decisions.
- Launched a new magazine: Energy Smarts for Michigan Business.
- Launched a new online energy audit tool for business customers that analyzes energy usage for specific business types and creates a personalized energy efficiency plan.
- Laid the groundwork for a new interactive business tool that offers a virtual tour of six interactive businesses for energy savings tips, rebates and other resources for each room of the facility (expected launch Q2, 2013).
- Laid the groundwork for a new energy efficiency directory that will allow customers to find reliable contractors (expected launch Q2, 2013).
- Launched a new Campaign Management tool that would allow the team to perform targeted marketing more effectively.
- Expanded the employee "Take the Challenge" building-by-building energy savings competition to include three additional office buildings.
- Created 49 new videos for residential and business customers, including our first bilingual video.
- Participated in over 50 community events.
- Conducted several online contests, including Detroit Red Wings Going Green contest, multiple Detroit Lions contests and a business association membership contest.

Collaboration Efforts

- Continued existing sports sponsorships (Red Wings and Lions) while investigating a new sports sponsorship with the Detroit Pistons.
- Expanded grocery store outreach to include two new stores from 2011. Customers at Hiller's Market, Plum Market and Papa Joe's Market received energy efficiency tips and were provided the opportunity to sign up for our monthly Energy Efficiency (EE) newsletter.
- Partnered with DTE's renewables team to launch the Bright Kids school program in the Thumb Region of Michigan.
- Partnered with Twelve Oaks Mall to help educate customers on EE and distribute literature.
- Collaborated with THAW during DTE's Week of Warmth to help raise money during a Red Wings game.
- Partnered with Meals on Wheels to distribute EE information and blankets.

Lessons Learned

- Targeted marketing approach is critical in educating customers about actions they can take to reduce energy usage.
- Mass media marketing is key to raise overall awareness of the program.
- Achieving an optimal mix of communication channels based on segment preferences is very important. Broad-based channels such as TV and radio are more effective to raise awareness.
- All tactics need to be evaluated to make sure that they are effective, and research should be done on tools and resources to make sure that they are adopted by customers.
- Continue to perform rapid experimentation of new tactics and evaluate results.

- Constantly search for gaps in educating customers about energy efficiency and bridge those gaps by building new tools and resources.
- Leverage Continuous Improvement techniques to minimize process defects and maximize collaboration with other programs.

Spend and Verified Net Savings Results

Chart 45 summarizes the spend and associated verified net savings results for E&A.

Program Participation Results

• In 2012, the E&A program resulted in over 4.6 million meaningful interactions with our customers.

Chart 46 displays the monthly customer touches.

Program Outlook

- 2012 was a step change for the E&A program both in terms of the scale and scope of the tactics and the tools and resources employed to reach customers. As the E&A team continues to seek new and innovative approaches to educate customers about energy efficiency, the focus will remain on the following key areas:
- Communicating the value of Energy Efficiency;
- Refining targeted marketing tactics;
- Developing engaging and innovative tools and resources while leveraging existing digital technologies like mobile applications and mobile-friendly web platforms;
- Providing exceptional customer experiences;
- Leveraging community events to promote face-to-face interactions in a fun and friendly atmosphere.
- The E&A spending and savings projections mirror the overall EO Program spending and savings since E&A spending and savings is a percentage of the total EO Program spending and savings.

Chart 47 summarizes the spending and associated savings projections.

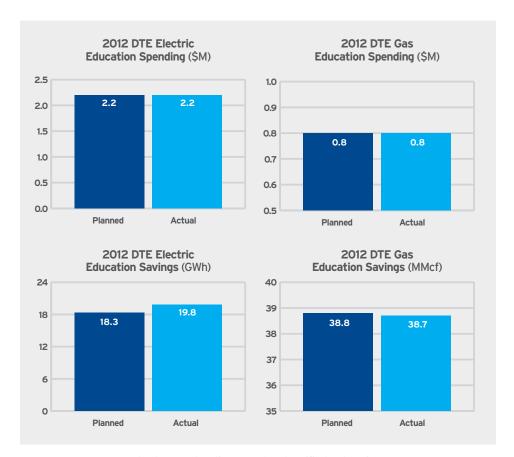


Chart 45 – Education Spend and Verified Net Savings

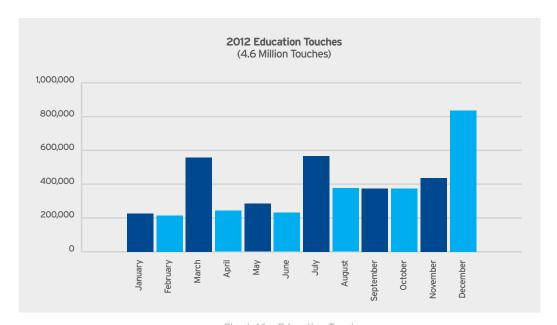


Chart 46 – Education Touches



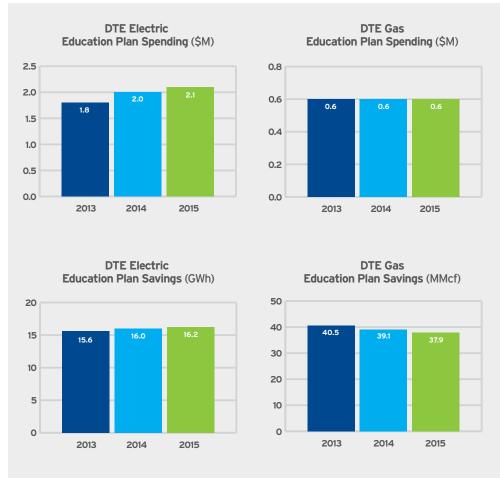


Chart 47 – Education Program Outlook

PILOT PROGRAM

Program Description

The objective of the Pilot program was to explore technologies and approaches to the markets that are not included in the foundational (Residential, Commercial & Industrial) programs. The Pilot program enabled DTE to measure energy savings and test cost effectiveness of emerging technologies. This program also tested customer adoption of new technologies and market adoption of existing technologies using new approaches. As designed, this program supported both Residential and C&I programs.

If the Pilot proves successful for commercialization, new programs or measures may be added as an emerging program or within a standard program offering.

Highlights

Including both gas and electric efforts, a total of 35 pilots were active in 2012. 15 had a Residential program focus, and 20 had a Commercial and Industrial program focus. Here is a short summary of each of them:

- Aclara Online Tool: Small Medium Business Online Analysis Tool. Pilot is currently active.
- Agricultural Grain Elevator Variable Frequency Drive Motors: Lab
 test at Lawrence Technological University to determine potential
 energy savings of using Variable Frequency Drive motors and soft start
 motors on grain elevators. Pilot has been completed.
- Agricultural Grain Elevator Phase 2: Phase 2 of Lawrence Technological University project moving to a field test of Variable Frequency Drive Motors. Pilot is currently active.

- Behavior-Based Energy Savings: An opt-out behavior-based program targeting 50,000 dual-fuel residential customers for energy savings and customer engagement using strategically segmented customers and delivering Home Energy Reports via mail with targeted tips to improve energy efficiency when compared to their neighbors. Pilot is currently active.
- Best-In-Class LED Reflector Lamps: A study to develop and maintain a list of the most energy-efficient LED bulbs in PAR 30 & PAR 38 categories. Pilot is ongoing.
- Boiler System Phase 2: Identify and quantify the higher energy savings
 potential that exists when space heating boiler systems are evaluated
 as a whole system and not just as à la carte measures, and test how to
 increase customer motivation to take recommended action. Pilot was
 commercialized.
- Building Energy Consultation (BEC): is a direct-install program for electric and gas customers that focused on targeted small business customers that have been under served within EO. This pilot program will educate the customer, provide free energy saving measures and generate leads for other DTE EO programs. The program completed 330 within a wide range of business types that include restaurants, convenience stores, beauty/barber shops and doctor/lawyer offices. Pilot is currently active.
- Connected Housing: Identify modeling differences in energy audits and energy saving measures applicable for connected condos and townhouses. Pilot was commercialized and new measures were added to the Michigan Energy Measures Database.
- Consumer Electronics: Measure the energy savings, consumer satisfaction and demand, and manufacturer response for incentivizing ENERGY STAR televisions, desktop computers and LCD computer monitors from Best Buy. Pilot was commercialized in 2012.

- SysTrack Power Manager: Verify energy savings and performance
 of the SysTrack computer software, which automatically shuts off
 computer equipment during periods of non-use. Pilot was completed
 and the technology was not recommended for commercialization.
- Customer Experience Market Study: Establish a do-it-yourself project selection and management environment to identify, manage and complete EE projects that will show them energy cost savings and help them understand how their contribution is helping the environment.
 Pilot is currently being implemented.
- DC Lighting 9th Floor GO: Demonstration Showcase of DC Microgrid Technology in a DTE office building. Pilot has been completed.
- DTE Efficiency Rewards: An opt-in behavior-based program targeting 12,500 residential customers for energy savings and enhanced customer engagement using an online experience and awarding customers points that may be exchanged for rewards offers for achieving energy savings when compared to the previous year. Pilot is currently active.
- DTE Efficiency Rewards Kits Enhancement: Cross promotion for Energy Efficiency Kits with DTE Efficiency Rewards. Pilot has been completed.
- E-Challenge: DTE Demonstration Showcases to test marketing approach to raise awareness for underutilized measures in the Commercial & Industrial program. Pilot is currently active.
- Energy Optimization Analytic Engine: The development of an advanced customer analytic engine that will define, develop and guide implementation of targeted, customer-centric, EO programs for C&I unassigned commercial segments. Pilot was commercialized and the engine is in use.
- Emerging Lighting Technology Oakland University: Identify, install
 and measure the performance and customer acceptance of emergent
 lighting technologies including solid state lighting (LEDs) at Oakland
 University. Pilot is currently active.

- E3: EPA Program that performs energy audits, environmental impact assessments and process efficiency of automotive manufacturers. Pilot was completed and program was not recommended for commercialization.
- GTI Emerging Technology Program: Membership to Gas Technological Institute for research. Pilot is currently active.
- High-Performance Parking Lot Lighting: Test a change from traditional
 parking lot/structure lighting system to high-performance solid state
 lighting system (with controls and varying lighting levels) and ensure it
 will not have an effect on security, safety or sales opportunity. Pilot was
 commercialized.
- House of Worship Direct-Install and Behavior: Test our ability to motivate faith-based organizations to reduce energy usage through behavior-based low-cost/no-cost improvements when motivated with free direct-install measures and education. Pilot is currently active.
- LED Bulb Initiative: A project to test the concept that a consumer
 would be willing to purchase a premium product that provides a
 better light quality and is environmentally friendly once a certain price
 tolerance is reached; motivate manufacturers to transform market.
 Pilot was complete.
- LED Street Lighting: Test the savings, performance and customer acceptance of retrofitting existing street lights with LED in the cities of Ann Arbor and Dearborn. Pilot is currently inactive.
- Low-income Multifamily Whole Building Retrofits: Design, create and deliver a "whole building solution" for weatherization and energy savings for multifamily buildings. Pilot is currently active.

- Novitherm Reflectors: Measure the savings and customer impact by installing Novitherm heat reflectors in multifamily buildings behind steam or hot water boiler radiators on external walls to reflect heat back into the space. Pilot was commercialized.
- Pre-Pay Program and EE Kits: Test if the Pre-Pay program is an
 effective marketing channel for the Energy Efficiency Kit. Pilot was
 completed and marketing approach was not recommended for
 commercialization.
- Retro Commissioning: Test and validate acceptance and savings
 through an offering of existing C&I EO rebates, Building Operator
 Certification Training, energy audits, energy management support and
 low-cost/no-cost behavioral measures with financing. Pilot has been
 completed. Energy savings credit for Building Operator Certification
 was added to the 2013 Michigan Energy Measures Database. Further
 investigation is required to enhance program design before a decision
 to commercialize a Retro Commissioning Program.
- School Energy Challenge: A competition between 10 participating schools to make energy saving changes with the help of school facility operators. Pilot was recommended to be reassessed.
- U of M Multidisciplinary Action Project: A University of Michigan Ross School of Business research study to identify a comprehensive home energy management solution that could become part of the company's energy efficiency rebate program. Pilot has been completed.
- U of M SNRE Project: A project for University of Michigan students in the School of Natural Resources and Environment to understand how single-family households in Michigan use and save energy, assess the performance of DTE's current home energy audit and retrofit programs, and recommend ways to increase program participation within the utility's residential customer base. Pilot has been completed.

- White Tags: Service that purchases energy credits resulting from energy savings achieved by Commercial & Industrial Customers and transforms them into tradable energy certificates. Pilot is currently active.
- Whole Home Phase 2 Habitat for Humanity: Teach Habitat how to capture and quantify the most energy efficiency within the type of work they are already doing with minimal additional cost. Pilot was commercialized into our Low-income program.
- Whole Home Phase 2 Michigan Saves: Work with local MI SAVES, home mortgage giant Prospect Mortgage and the Building Science Academy to package energy-efficient mortgage services in a onestop mortgage solution. Pilot completed and program was not recommended for commercialization.
- Whole Home Phase 2 MSHDA: Leverage with the Michigan State
 Housing Development Authority on weatherization for Federal HUD
 money that flows into Michigan. Pilot was recommended to be
 reassessed.
- Whole Home Phase 3: The Whole Home Phase 3 Pilot is developing and testing processes and new work management tools designed to shift the value proposition for the homeowner away from utility rebates and toward solving problems with a weatherization retrofit project that is done well, at a competitive price and a measurable result in improved performance. Pilot is currently active.

Challenges

 Our DTE Energy Efficiency Rewards program encountered issues in recruiting customers to participate in the program. In addition we have had trouble getting return visits to the website and having consumers redeem their points.

- Our White Tags program had a very lengthy sales cycle due to the fact that the product is unfamiliar and is hard for people to understand when they first hear about it. It takes a lot of education to get potential customers comfortable with the process.
- Other issues with obtaining customers for the White Tags program arise because there is much lower up-front cash value incentive to the customer than traditional custom rebates; targeted White Tags projects can be those that include behavioral practices along with capital projects, which can be harder and more expensive to validate, and only very large customers/projects can benefit from White Tags, which severely limits the potential customer pool.

Accomplishments

- 2012 was even more successful than previous years with the completion of 21 pilots, 10 of which were commercialized.
- The Pilot Team also was able to meet both their budget and energy savings goals.
- Our Behavior-Based Energy Savings program was able to integrate two new electric and one new gas deemed savings value into the Michigan Energy Measures Database (MEMD).
- New Consumer Electronics measures were added to the Residential ENERGY STAR Program.
- Our House of Worship (HoW) Pilot had 46 of 50 HoWs complete the 12-month process, and the majority of HoWs earned double-digit percentage annual energy savings.
- HoWs are moving ahead with ENERGY STAR Certification, and thanks to the Pilot, Michigan now has more ENERGY STAR Certified HoWs than any other state.
- Our High-Performance Parking Lot Lighting Initial Demonstration, performed at an automobile dealership, showed that the new system achieved greater than 90% energy saving when compared to conventional lighting systems with identical ON/OFF schedules.

Collaboration Efforts

- Participate in MPSC EO Program Design and Implementation Collaborative.
- Participate in MPSC EO Program Technical Sub Committee for the evaluation of new measures.
- Collaborate with various industry organizations focused on energy efficiency.



Lessons Learned

- It is important to develop or acquire studies to better understand needs and wants of targeted market to improve pilot success.
- Large energy savings can be achieved with targeted demonstrations for best applications of underutilized or unfamiliar technologies combined with integrated control systems. Increased efforts are needed to enhance customer awareness of these applications.
- Clearly defining the objective and hypothesis for the Pilot significantly improves the Pilot learnings.
- Standardized stage-gate processes for Pilot project governance helps improve the quality of Pilots.

Spend and Verified Net Savings Results

Chart 48 summarizes the spend and associated verified net savings results.

Program Outlook

Product development focus areas include:

- Enhanced model for Audit & Weatherization and a new Home Energy Management Emerging program under the Residential program.
- New small business programs.
- Highly effective models for delivery of sustainable operational and maintenance savings to Commercial & Industrial customers.
- Tighter collaboration with trade allies to help find solutions to raise awareness of high potential yet underutilized or unfamiliar energy savings technologies.

Chart 49 summarizes the Pilot program outlook.

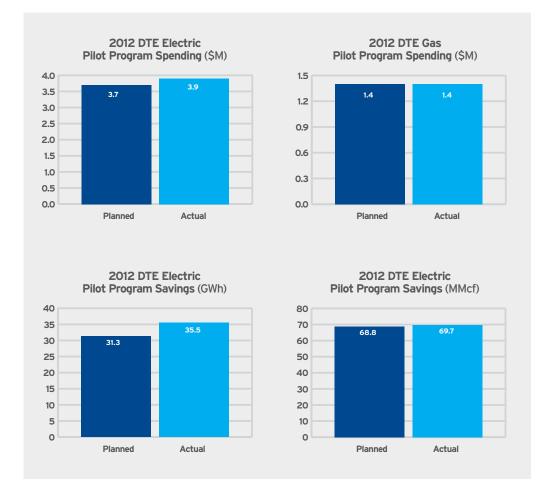


Chart 48 - Pilot Program Spend and Verified Net Savings

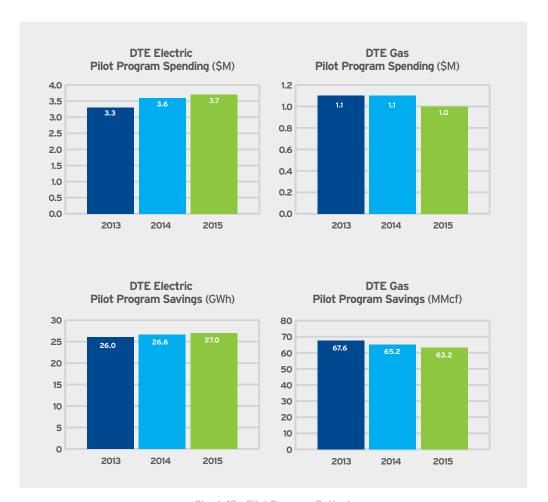


Chart 49 - Pilot Program Outlook





EO PROGRAM ACHIEVEMENTS

DTE Energy | 2012 Energy Optimization Annual Report

Following is a summary of DTE's EO program achievement.

Energy Savings

- Since 2009, DTE has saved over 1,700 GWh, or approximately 3.9% of planned annual retail sales, for electric customers and 3,800 MMcf, or approximately 2.4% of planned annual retail sales, for gas customers.
- The electric savings amount is equivalent to energy required to power all the homes in Lansing, MI for over 3 years.
- The gas savings are equivalent to heat the same number of homes in Lansing, MI for 1 year.
- The electric savings resulted in DTE not building approximately half of a new coal-fired power plant.
- In a recent internal benchmarking, DTE's EO program has been ranked highly with respect to cost effectiveness and savings when compared to other utility companies.

Monetary Savings

- On an annualized basis, residential electric-only customers pay on average about \$18 in surcharges; gas-only customers pay on average about \$15, and a combo customer pays on average about \$34. This amounts to less than 2% of the total bill. Residential customers participating in one of our EO entry level programs saved a combo customer between \$45 (i.e. Kits) and \$185 (i.e. Home Energy Consultation) on their annual energy bills. Customers participating in more than one program may realize an even greater benefit of between \$75 (i.e. add an ENERGY STAR appliance rebate) and \$635 (i.e. add Appliance Recycling and Whole Home weatherization) on their energy bills. In other words, they can save from 2% to 30% of their annual bill depending on their level of participation.
- Through 2012, customers participating in EO programs have saved \$332 million in energy savings.

Through 2012, DTE has invested an estimated \$260 million in its EO program (\$187M DTE Electric and \$73M DTE Gas). By 2015, DTE's total EO program investment will reach \$0.6B, which will provide an estimated total benefit of \$4.5 billion in avoided costs to participating customers through 2029.

Economic Development Benefits

- DTE's EO programs resulted in Implementation Contractor's (ICs)
 establishing local offices (in Detroit, Livonia and Lansing) and the
 hiring of local talent to operate and manage their respective programs.
- Through 2012, 235 Michigan-based jobs have been created by the ICs under contract with DTE as summarized in **Table 7**. These jobs include field operations staff, appliance pick-up drivers, call center representatives, and program managers.

IC Name	Michigan-Based Jobs	
DTE Energy	35	
ICF International	28	
JACO Environmental	25	
Solutions for Energy Efficient Logistics (SEEL)	cient Logistics (SEEL) 100	
ational Energy Foundation (NEF) 4		
KEMA	35	
Navigant Consulting	8	
Totals	235	

Table 7 – Implementation Contractor Jobs

- Throughout the state of Michigan, over 2,400 small- and medium-sized contractors have actively participated with utilities in EO programs.
- Customers and communities benefit from the new jobs and investment in the community.

Program Participation

- Through 2012, more than 765,000 DTE customers have directly participated in the EO program. Customers have upgraded equipment, making them more energy efficient, and they have also been educated about simple actions they can take to save on their energy bill. DTE has distributed over 15,000,000 CFL bulbs to residential customers. Over 15,000 of DTE's low-income customers have had full home weatherization through the program.
- Based on survey results, over 96% of participating customers were satisfied with the EO program.
- In 2012 alone, more than 286,000 DTE customers took control of their energy use through the EO programs and saved millions of dollars as a result. To give some perspective on the magnitude of this effort, here are some of DTE's 2012 accomplishments:
- Outfitted over 47,800 apartment units with EE measures.
- Recycled more than 28,800 appliances.
- Performed close to 52,000 in-home energy consultations.
- More than 56,000 low-income customers participated in the EO program.
- Discounted almost 6.0-million compact fluorescent light bulbs (CFLs), Light Emitting Diode (LEDs), holiday lights.
- Provided over 37,000 energy efficiency kits to customers.
- Over 18,900 customers benefitted from HVAC upgrades.

- More than 12,400 businesses participated in the EO program.
- Education and awareness programs resulted in over 4,600,000 meaningful interactions with our customers.

In addition, regional and national organizations recognized DTE's EO program throughout 2012 as follows:

- Received the Stewardship Award of Excellence from Platt's.
- Received the Midwest Energy Efficiency Alliance (MEEA) 2012
 Inspiring Efficiency Award for "innovative advances" toward saving money and reducing energy use.

Environmental Benefits

Since 2009, the following environmental benefits were achieved:

- The electric and gas savings amount is equivalent to greenhouse gas emissions avoided by recycling 44,990 tons of waste instead of sending it to the landfill.
- The annual carbon emissions that can be avoided are equivalent to burning approximately 515 railcars worth of coal or preserving 926 acres of forest rather than turning it to commercial use.
- The electric savings eliminates the need for approximately half of a new coal-fired powerplant.



PROGRAM ADMINISTRATION

Evaluation, Measurement and Verification (EM&V)

Michigan's EO construct requires independent verification of the utilities' claimed energy savings. This work is performed by an independent Evaluation, Measurement, and Verification (EM&V) contractor and must be performed to industry standards and guidelines developed by the Evaluation Workgroup of the MPSC Energy Optimization Collaborative. Currently Navigant Consulting fills this role for DTE.

DTE and its evaluation contractor are active participants in the Evaluation Workgroup; along with Consumers Energy and cooperative and municipal utilities, with their respective evaluation contractors, and the MPSC staff. In addition to developing guidelines for evaluation, members of the Collaborative established a statewide resource for technical energy savings values for thousands of energy-efficient measures, known as the Michigan Energy Measures Database (MEMD). MEMD enables fast and efficient entry, tracking and evaluation for the vast majority of measures installed in Michigan EO programs, regardless of program provider.

The MEMD is managed by Morgan Marketing Partners under contract to the MPSC. The Evaluation Workgroup oversees the management and updating of MEMD. Updating measure values to reflect changes in standards, incorporate newer studies, etc., and make them more representative of Michigan follows a well-defined process involving all stakeholders. DTE and Consumers work together with their evaluation contractors to conduct foundational research on important measures to develop up-to-date Michigan-based values. Since 2009, numerous additions and "calibrations" have been made to MEMD to make the values more encompassing, accurate and Michigan-specific.

Implementation Contractors

Many of the program Implementation Contractors (ICs) who worked on their respective programs in 2011 continued in 2012, while several expanded their Michigan presence. ICF replaced CLEAResult as the IC for low-income and Audit & Weatherization programs. National Energy Foundation was hired to implement the Think! Energy schools program. Navigant Consulting replaced the Opinion Dynamics Corporation as the contractor for EM&V.

Table 8 is a summary of the ICs assigned to the EO programs, where the shading indicates changes in 2012.



PROGRAM ADMINISTRATION

DTE Energy | 2012 Energy Optimization Annual Report

EO Program	IC Name	Corporate Location	Local Office
ENERGY STAR Products	ICF International	Fairfax, VA	Detroit, MI
Appliance Recycling	JACO Environmental	Everett, WA	Livonia, MI
HVAC & Water Heating	ICF International	Fairfax, VA	Detroit, MI
Audit and Weatherization – Insulation and Window and Home Performance	ICF International	Fairfax, VA	Detroit, MI
Home Energy Consultations	Solutions for Energy Efficient Logistics (SEEL)	Detroit, MI	Detroit, MI
Multifamily	Solutions for Energy Efficient Logistics (SEEL)	Detroit, MI	Detroit, MI
Schools	National Energy Foundation (NEF)	Salt Lake City, UT	Detroit, MI
Energy Efficiency Assistance	ICF International	Fairfax, VA	Detroit, MI
Commercial and Industrial Programs	KEMA	Oakland, CA	Detroit, MI
EM&V	Navigant Consulting	Chicago, IL	Ann Arbor, MI

Table 8 – List of Implementation Contractors



FUTURE PLANS

Summary of 2012 Rate Order

In August 2012, DTE Electric and DTE Gas filed updated EO plans for the years 2013–2015, which, respectively, were approved on December 20, 2012 and December 6, 2012. The approved DTE Electric plan forecast spending of \$249M, verified net energy savings of 1,613 GWh, and the DTE Gas plan forecast spending of \$75M and verified net energy savings of 3,921 MMcf. In a change from past plans, the energy savings goals are presented in terms of verified net energy savings. These approved plans are the basis for all the 2013–2015 spend and energy savings forecast presented in this annual report.

Chart 50 provides a summary of the forecasted spending and verified net energy savings plan filed.

Governor's Task Force on Energy

As a follow-up to his November 28, 2012 Energy Message, Michigan Governor Rick Snyder has established a year-long task force chaired by John Quackenbush (MPSC) and Steve Bakkal (Energy Office, Michigan Economic Development Corporation). The goal of the task force is to collect data and analysis (a "fact base") that will lend support to future energy policy debates – the report will not contain policy recommendations. The task force will focus on the Regulatory Model/Choice, Renewables, Energy Efficiency and additional topics that are currently described as "all other."

The Governor is expected to announce his energy policy recommendations in the four areas by the end of 2013. DTE will have a key role in the process by providing written report/testimony to the task force and supporting the MPSC and the Governor's office as required.



Chart 50 – Forecast of EO Spending and Verified Net Energy Savings

FUTURE PLANS

DTE Energy | 2012 Energy Optimization Annual Report

Challenges

Savings

Most states are not achieving 1% savings, and those that do are spending, on average, 3.71% of revenue. According to the American Council for an Energy-Efficient Economy (ACEEE), 2012 State EO Scorecard based on 2010 results:

- Highest savings at a state level is 2.32% of sales.
- 2012 DTE electric results would rank Michigan at #4 in the country.
- Only 9 states achieved higher than 1% savings, and only 16 states achieved greater than 0.75%.

Savings from measures and programs are decreasing based on changes to standards, codes and usage patterns. These decreases make it more difficult to cost-effectively reduce energy use. Some examples are:

- Shift from T12 to T8 lighting as a baseline will reduce expected savings by 50%.
- CFL savings are being reduced by 17% from 2012 to 2015.

Finally, verification studies are refining deemed savings amounts as behaviors and appliances change. For example, Appliance Recycling savings are expected to reduce 30% based on metering studies.

Cost Challenges

The cost per Mwh of energy saved in DTE's EO program has increased year over year as a result of the following challenges:

- New technologies such as LED lights are more expensive.
- Customer baseline installed efficiency keeps rising as our program and other factors make customers more energy-conscious.
- Marketing costs increase when attempting to capture hard-to-reach segments.







CONCLUSION

2012 was a pivotal year for DTE's EO program. The year was successful

in all key areas: energy savings, spending, and participation. Customers were made aware of energy efficiency benefits and the programs offered by DTE via innovative approaches and targeted campaigns. Customer experience was enhanced by improving the content of the website, creating new educational tools and resources, and expanding social media and contests.

Programs were upgraded and delivered with high quality, meeting the ever-rising level of customer expectations. Promising Pilot programs were transitioned to full program offerings, and additional Pilots were undertaken to stay ahead of the technology curve and to test innovative market approaches. Continuous Improvement activity rose again in 2012 as several efforts were undertaken to eliminate defects and improve efficiency in our processes. Collaboration with other utilities, and the energy efficiency community at large, provided additional benefit to DTE's customers.

Opportunities and challenges lie ahead in 2013 and DTE is well-positioned to provide value to its customers and other stakeholders through a robust and well-run energy efficiency program. We have a solid plan through 2015, and our strategic efforts have resulted in increased awareness, improved experiences and higher satisfaction among our customers. In 2013, DTE will play a key role by working closely with the Governor's task force and the MPSC in supporting the collection of data and analysis that will lend support to future energy policy debates. As our maturity with the EO program continues to grow, we will continue to make great strides in our journey to become the best operated energy efficiency program in North America.



SEAL IN THE SAVINGS THIS WINTER.

