Energy Efficiency Question 3: *What are the total dollar amounts of investment and savings achieved to date, and what levels are expected to be achieved when the 2012 energy savings goals are reached for natural gas and electricity? Will the 2012 energy optimization standard continue to be achieved through 2015 and beyond?*

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**Executive summary**

1. For program years 2009 through 2011, DTE Energy has exceeded the Energy Optimization (EO) savings goals set up for program providers. Preliminary 2012 results indicate that the company will also exceed goals for the program year, with third party evaluation and verification to be completed by Q2 2013.

2. For program years 2013-2015, DTE Energy expects a higher level of difficulty in reaching or exceeding the EO goals.

3. After 2015, continuing with the current EO structure will be challenging. The statewide energy efficiency potential study scheduled to be completed in the fall of 2013 will provide more insight as to the feasibility to continue to meet the current standard. See response to Energy Efficiency Question 7 for more details.

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1. **For program years 2009 through 2011, DTE Energy has exceeded the Energy Optimization (EO) goals set up for program providers. Preliminary 2012 results indicate that the company will also exceed goals for the program year, with third party evaluation and verification to be completed by Q2 2013.**

   From 2009 to 2012, the energy savings legislative minimums ramped up from 0.3% to 1.0% of total annual retail electricity sales and from 0.1% to 0.75% of total annual retail natural gas sales. During this period of time, DTE Energy has managed to successfully meet the annual EO goals while balancing growth of the portfolio of programs and the changing dynamics in the marketplace. Charts 1 and 2 show the annual energy savings achieved for electricity and gas respectively, as well as the annual legislative minimum goals.

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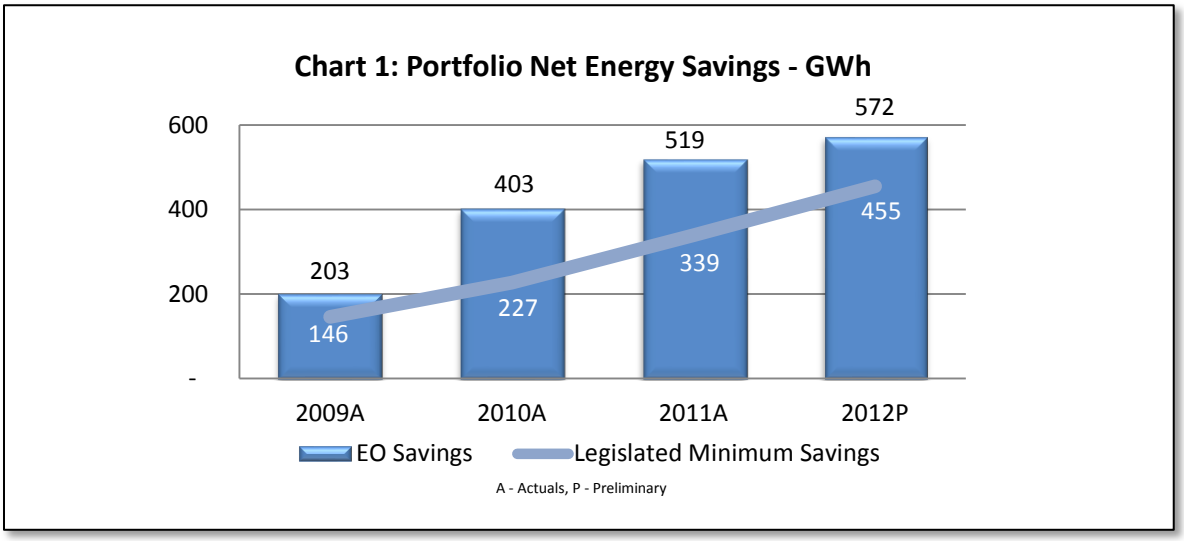


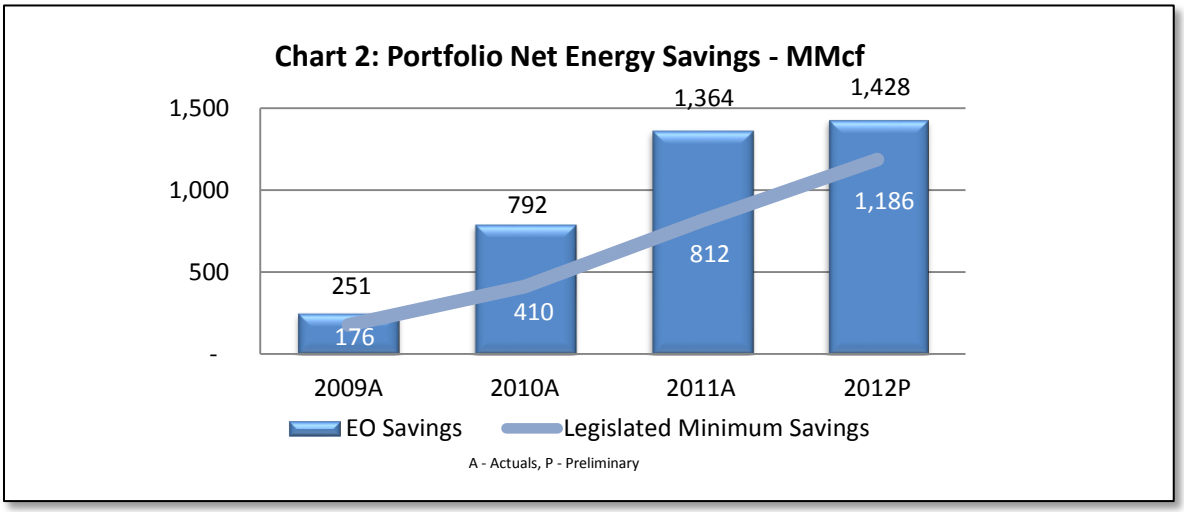


In addition to meeting the energy savings requirements, DTE Energy has managed the EO investments, for both electricity and gas, to stay within the legislative cost caps. Cost caps also ramped up from 2009 to 2012, from 0.75% to 2% for both electricity and gas. Charts 3 and 4 show the actual spend per program year versus the cost cap, for electricity and gas, respectively

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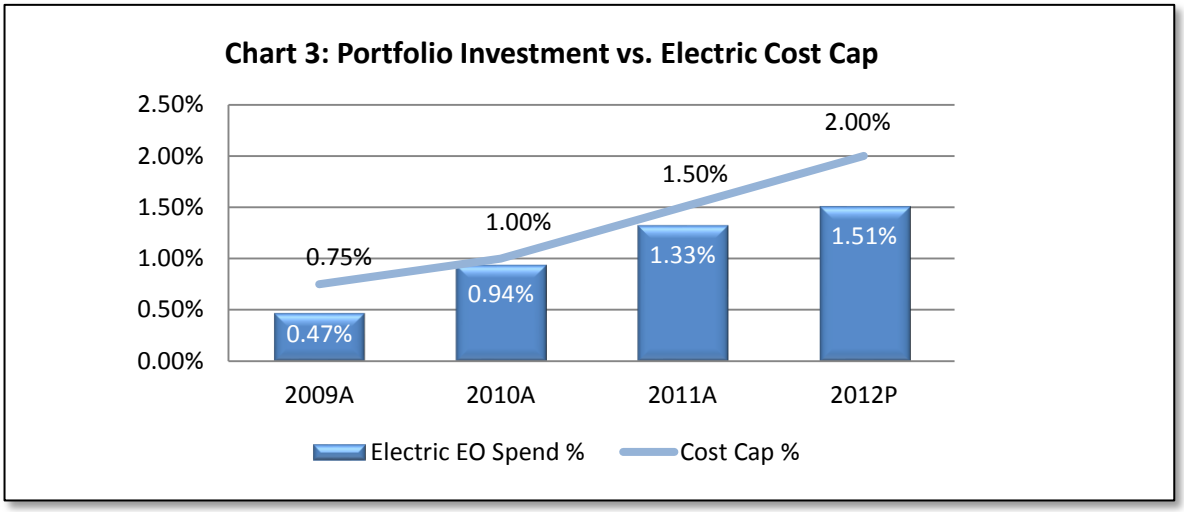


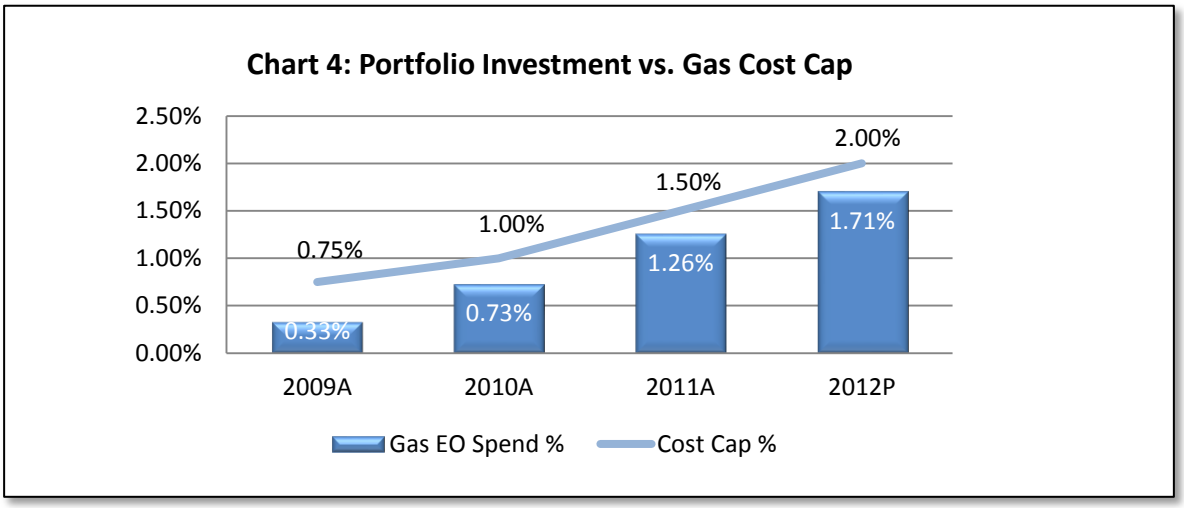


**2. For program years 2013 to 2015, DTE Energy expects a higher level of difficulty in reaching the EO goals.**

Several factors contribute to the difficulty in achieving savings goals for years 2013 to 2015:

- The definitions of savings that are recordable against the energy savings goals narrowed as the program matured and the new stricter definitions will continue for 2013 to 2015, meaning the program implementers need to achieve more overall savings in order to get to the same recordable amount of energy savings.

- In 2009 – 2010, all the energy savings delivered by utility programs and certified as having been delivered by an Independent Evaluation Contractor could be counted.
- In 2011, the definition was narrowed down to only a proportion of the delivered measures, which were installed <u>and</u> still in use when checked by the Evaluation Contractor. In addition to reducing the allowable savings, this adjustment adds costs to the programs, since determining the allowable proportion requires additional research each year.
- In 2012, an additional adjustment was added to disallow credits for measures that would have been installed without the program (often known as "free riders"). This adjustment is often referred to as adjustment from Gross Savings to Net Savings.

- Opportunities for savings have been reduced because of changes in appliance and lighting standards. Rising standards raise the efficiency of the least efficient equipment that vendors are allowed to sell thereby reducing the difference in energy efficiency between the base, or standard, offering and more efficient options. This, by definition, reduces the opportunity for an energy efficiency program targeted at less efficient appliances and lighting to achieve savings.
- The cost effectiveness of energy efficiency measures is constrained as the forecast of avoided cost from energy efficiency becomes lower than what was expected when Michigan's 2008 energy legislation was passed, due to lower power and capacity prices in the market.
- In the first several years, the programs were able to attract early adopters with lower acquisition costs to energy efficiency programs. As the programs reach deeper into the market, it has become more difficult and costly to attract participants.
- The program success between 2009 and 2012 has also made it more difficult to achieve future savings by virtue of removing the savings achieved in these years from the pool of potential savings going forward.

DTE Energy's electric plan for 2013-2015 shows the costs will continue to increase year over year in order to achieve the EO goals (see chart 5). As costs increase, savings plateau due to factors such as the Installation Rate Adjustment Factor (IRAF), gross to net savings adjustment, higher customer acquisition costs and other changes in the standard (see chart 6).

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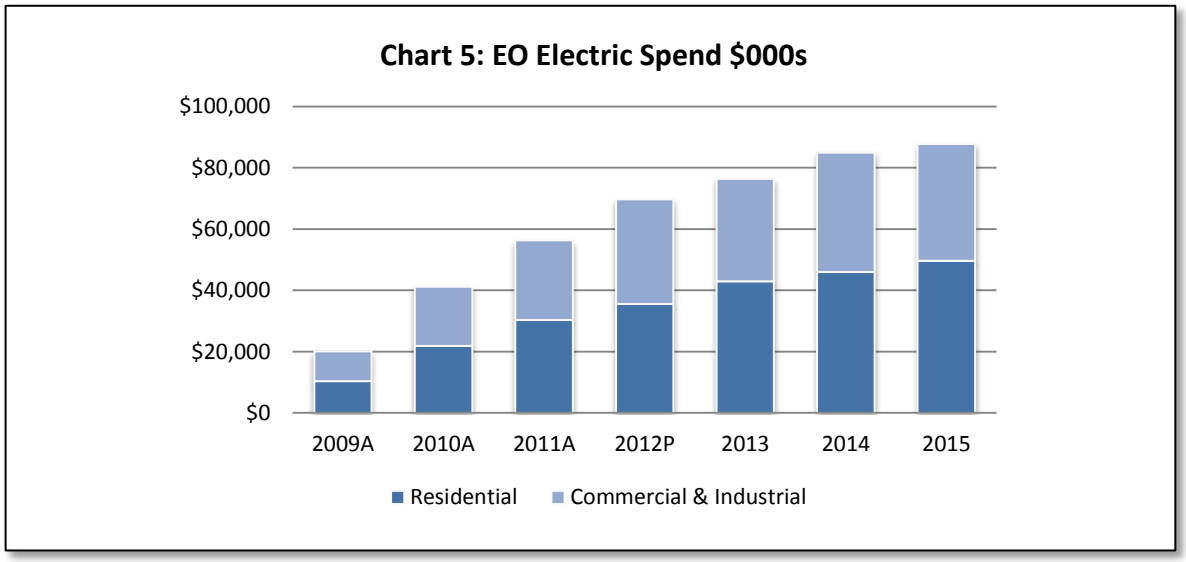


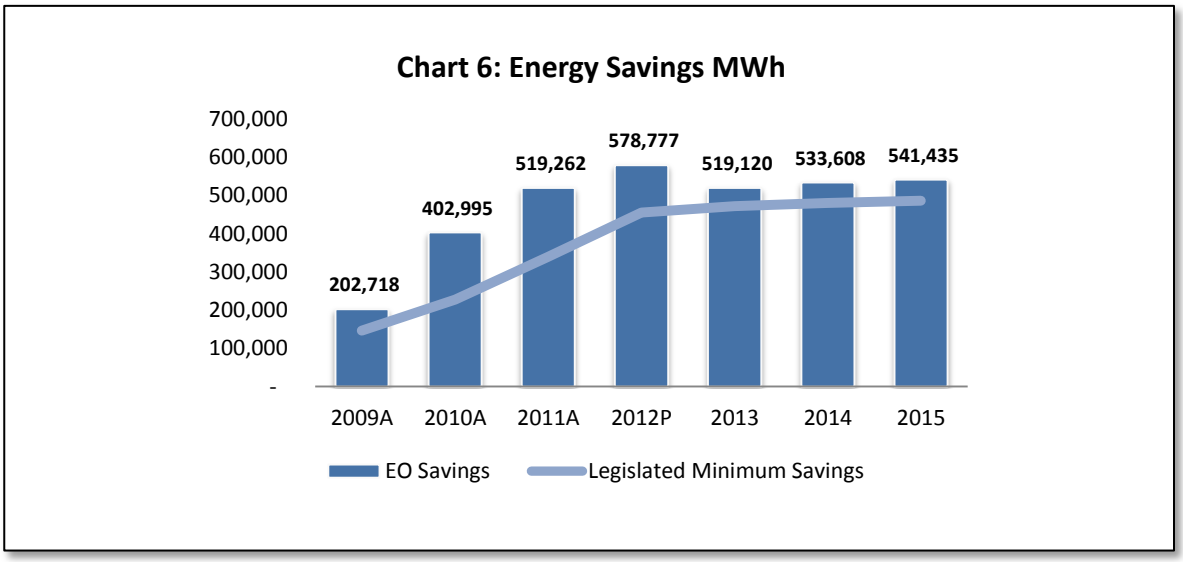

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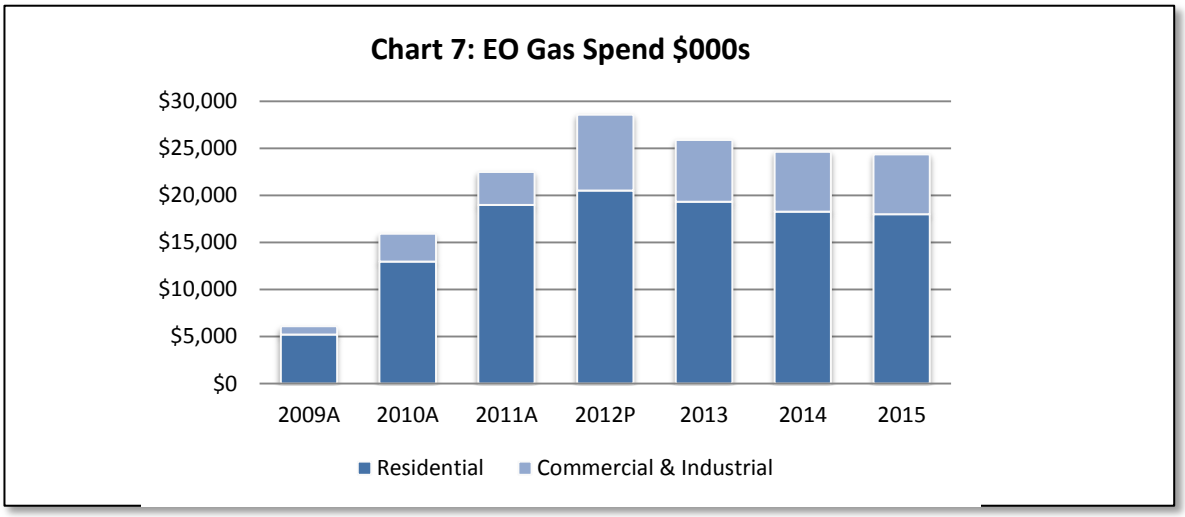


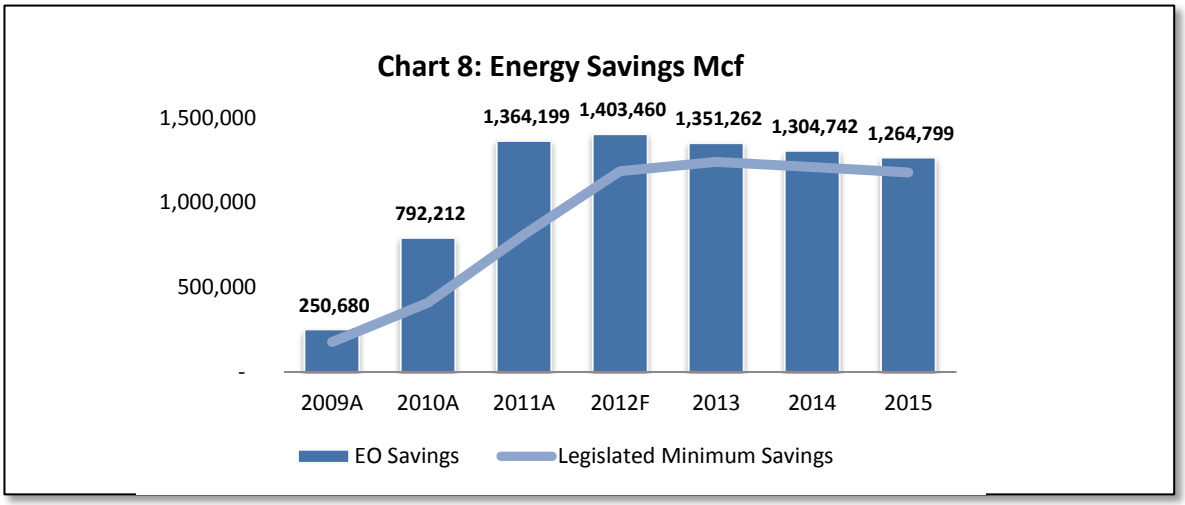


3. **After 2015, continuing with current EO structure will be challenging. The statewide energy efficiency potential study scheduled to be completed in the fall of 2013 will provide more insight on the feasibility to continue to meet the standard. See response to Energy Efficiency Question 7 for more details.**

   The importance of customer affordability strongly suggests the need to manage energy efficiency surcharges, at the same time as energy efficiency compliance costs are increasing and cost-effective energy efficiency technologies become more limited.