



## Energy Efficiency Messaging Overview

Energy efficiency can be a challenging issue for policymakers, the media, and the general public to understand. It requires an understanding of the utility framework of each state, plus knowledge of an often complicated and archaic regulatory structure. More importantly, aside from the lack of understanding of energy efficiency policies, there is little realization of the true economic and social impact from energy efficiency for consumers, businesses, industry and the local economy.

This document is intended to provide energy efficiency advocates with an overview of important policy messages and to dispel common misperceptions and criticisms. Whether we are defending programs and policies currently in place or speaking in support of expanded opportunities for energy efficiency, it is imperative that we continue to educate policymakers and the public of its value to ensure continued investment.

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#### I. **Key Messages That Resonate With Policymakers**

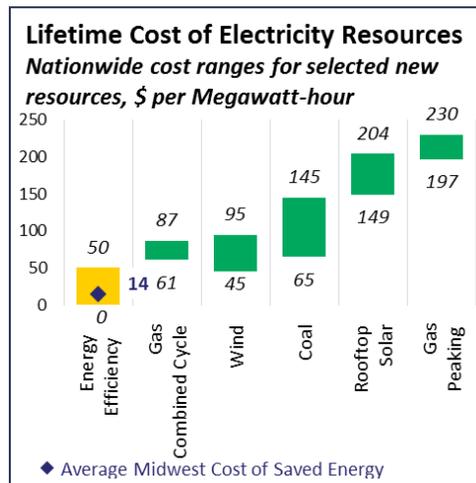
- Cost-effective energy efficiency creates jobs, helps customers save money, and improves business competitiveness.
- Energy efficiency has a positive return on investment (ROI). In states in the Midwest, the ROI of energy efficiency averages between \$2-\$3 dollars saved for every dollar invested.
- Energy efficiency helps reduce costs for customers in all rate classes. It is the most cost effective energy resource option.
- For businesses, energy efficiency is a low-cost strategy to keep energy costs under control and provide protection against price volatility.

## II. Common Arguments Against Energy Efficiency

### Theme: "Energy efficiency is too costly"

*Claim: Energy efficiency programs will cost millions of dollars in the coming years*

- Energy efficiency is the cheapest resource in the Midwest, at an average of \$14 per megawatt hour. New natural gas and coal-fired power plants are three times as expensive as energy efficiency<sup>i</sup>.



Source: LBNL 2014, Lazard 2013<sup>ii</sup>

- Energy efficiency programs are already required to be cost effective:
  - These programs cost money to implement, but they result in significantly more savings than they cost.
  - State public utility commissions or state energy offices are responsible for reviewing and approving utility spending on energy efficiency and will only approve those programs for which one dollar invested will yield at least one dollar in benefits.
  - For example, energy efficiency programs for commercial and industrial customers in Indiana resulted in over \$5 of savings for every dollar invested<sup>iii</sup>
- Cost-effective energy efficiency helps reduce costs for all customers.
- EE investments stay in the state, creating jobs and boosting local economies. Many other generation or transmission and distribution investments do not.

*Claim: We need to protect ratepayers – energy efficiency charges increase utility rates*

- Customers do not pay rates, they pay bills, and energy efficiency investments reduce utility bills:
  - Even though investment in energy efficiency may sometimes increase electric rates in the short term, bills go down on the whole over the long term because customers use less power after energy efficiency investments are made.

- This is similar to investments a business makes, where a company might buy new equipment today in order to reduce costs tomorrow.
  - Bills show the amount paid for energy with efficiency programs in place and the cost of energy efficiency, but not what a consumer *would have paid had those programs not been in place*.
- Energy efficiency lowers overall electricity costs by reducing the amount of expensive peaking power that needs to be acquired on hot summer days.
- Programs are typically already required to be cost-effective to be approved by regulators.

*Claim: All the low hanging fruit is gone, remaining options are very expensive*

- Independent evaluation finds energy efficiency programs to be low cost and have a positive ROI (benefit-cost ratio).
- Nationally, positive ROI and low cost has been maintained for more than two decades – even after many years of successful programs, the cost of saved energy is typically less than 3 cents per kWh, compared to an average national electric retail price of over 10 cents per kWh.
  - Energy efficiency is still the least cost resource. Even if programs become more expensive relative to past energy efficiency programs, they are still lower cost than other generation, transmission, and distribution options.
- Over time, implementing best practices can lower administrative costs, capture economies of scale, and take advantage of new technologies:
  - In the Midwest, program costs can often decline with experience and learning, leading to improved economics<sup>iv</sup>. In Michigan, a recent report from the Public Service Commission showed that programs are even more cost effective than in previous years.<sup>v</sup>
- There is a need to look at the whole portfolio, not just individual measures or programs. As new lighting standards are phased in and energy efficiency programs evolve over time, there will be an increased focus on holistic solutions to saving energy through portfolio approaches, behavioral programs, and technological solutions. This can enable savings which are not related to a specific measure.

*Claim: If energy efficiency is cost effective, customers will do it on their own*

- Research indicates this is not the case.<sup>vi</sup>
- For large energy consumers, internal accounting rules often require a 1 or 2 year payback:
  - Many cost-effective projects do not meet this investment hurdle, even if a project would save a lot of money over the life of the project.
- Facility managers may not be energy experts and be unfamiliar with the work required.
- Energy efficiency capital investments compete with other investments to improve productivity and a company is likely to invest in core business functions.

- Chief Financial Officers (CFOs) may be the decision makers on whether a project moves forward, but may not be familiar with proposed energy efficiency investments.
- There are system-wide benefits from energy efficiency that accrue to all customers. All customers should participate and pay for this resource since everyone benefits.

**Theme: The fundamentals have changed since energy efficiency policy was adopted**

*Claim: Today, electric growth is slow or flat, so energy efficiency is not needed*

- Although electric growth is lower than in the past, overall national electric usage still increased 0.7% this year compared to last year.
- There remains a need to lower peak demand to move off the most expensive resources.
- Increased investment in energy efficiency can be a resource to reduce the need for grid related investments<sup>vii</sup> as well as to lower peak demand.<sup>viii</sup>
- Our energy infrastructure is old. Energy efficiency helps delay or eliminate the need for significant investments to energy infrastructure.
- Even with no electric growth, energy efficiency still lowers the cost of energy.

*Claim: The shale gas revolution means we no longer need to worry about high electricity costs*

- Not every state has shale gas. If you are not a shale gas state, investing in natural gas resources means sending money out of state. Energy efficiency investments happen locally so the economic benefits remain local.
- Investment in energy efficiency helps protect against volatile gas prices.
- Converting our electric system to natural gas requires significant infrastructure investments that will take years to build out. The benefits of energy efficiency can be realized much more quickly.
- Energy efficiency programs have a levelized cost of about 3 cents per kWh<sup>ix</sup>: Energy efficiency is the lowest cost resource. By comparison, natural gas has a levelized cost of between 6 and 13 cents per kWh.<sup>x</sup>

**III. General Energy Efficiency Points**

- Both advocates and utilities agree: energy efficiency is the lowest cost resource.
- In addition to saving money, energy efficiency results in more comfortable homes and more competitive and productive businesses.
- Energy efficiency has incredibly high levels of support among the public:
  - A recent poll found that 95% of Midwesterners support increasing energy efficiency – higher than support for any energy source.<sup>xi</sup>
  - In Ohio, 85% of Republicans and 81% of Democrats **strongly** support energy efficiency.<sup>xii</sup>
- Utilities who engage their customers by offering more programs such as energy efficiency opportunities have more satisfied customers.<sup>xiii</sup>

- Approved programs are typically already required to be cost-effective.
- At least 25 states have enacted long term EEPS policies<sup>xiv</sup>, which make up nearly 60% of electricity sales in the United States. Policy drives program investments.
- It is Important for all customer classes to participate in EE programs:
  - Energy efficiency is a resource – industrial customers don’t get to choose whether to pay for nuclear or natural gas generation costs – energy efficiency is no different.
- Efficiency messaging resonates when it is discussed in terms of freedom of choice, control, and autonomy:
  - Energy efficiency empowers customers to make their own choices about their power consumption.
  - Energy efficiency is a way to use energy smarter in order to make our lives more comfortable.
- Energy efficiency policies enable exciting new technology to come to the marketplace which will save customers money over the long term.
- Increased education and awareness about energy efficiency can help drive future energy savings.
- Energy efficiency is sometimes described as something that will negatively impact utilities because energy efficiency reduces electricity sales. However, sensible utility regulation can ensure Energy efficiency investments are treated the same as other investments and mitigate these concerns.
- Energy efficiency is an important resource to reduce carbon emissions and a valuable tool for state to cost effectively comply with the EPA’s Clean Power Plan.

#### IV. Terminology and other considerations

- Humanizing consumers: use "Customers" rather than "End-users" or "Ratepayers."
- Energy Efficiency Portfolio Standard policies: it is helpful to discuss savings "Targets" rather than "Mandates."
- Many policymakers and customers are unfamiliar with the specifics of EE policies, or even what energy efficiency is:
  - Basic education and outreach are important.
- The difference between bills and rates is not well understood – discussion should be in terms of impacts on utility bills, rather than utility rates.
  - Indiana Utility Regulatory Commission explains this distinction in detail in their recent report to the Indiana General Assembly<sup>xv</sup>:

“Energy efficiency programs have been implemented across the country because they **serve to minimize average electric bills** over the long term. Although minimizing rates typically does not minimize utility bills, **efficiency programs tend to lower a customer’s usage more than they increase system rates.**”
- The costs of energy efficiency get more attention than the benefits:

- It is easy to see the costs of energy efficiency because they are often listed on bills, while benefits occur system wide.
- “Conservation” is not always supported by consumers. It is important to emphasize that investing in energy efficiency does not mean forcing consumers to live in cold, dark homes.

<sup>ii</sup> LBNL 2014. Billingsley, MA, Hoffman, IM, Stuart, E, Schiller, SR, Goldman, CA, and LaCommare, K. 2014. The Program Administrator Cost of Energy Saved for Utility Customer-Funded Energy Efficiency Programs. Berkeley, CA: Ernesto Orlando Lawrence Berkeley National Laboratory. Report LBNL-6595E. Accessed 12/09/2014. <http://emp.lbl.gov/cost-saved-energy>

<sup>ii</sup> Lazard 2013. Lazard. (2013) "Levelized Cost of Energy Analysis - Version 7.0." New York, NY: Lazard, Ltd. Accessed 12/09/2014. <http://www.slideshare.net/SlaterTater/lazard-levelized-cost-of-energy-report>

<sup>iii</sup> DSM Report to General Assembly. Indiana Utility Regulatory Commission. Accessed 9/30/2014. [http://www.in.gov/iurc/files/DSM\\_Report\\_to\\_General\\_Assembly\\_w\\_Cover\\_Letter\\_8-15-2014\(1\).pdf](http://www.in.gov/iurc/files/DSM_Report_to_General_Assembly_w_Cover_Letter_8-15-2014(1).pdf).

<sup>iv</sup> Michigan Public Service Commission. Accessed 9/30/14. [http://www.michigan.gov/documents/mpsc/pa295report\\_447680\\_7.pdf/](http://www.michigan.gov/documents/mpsc/pa295report_447680_7.pdf/)

<sup>v</sup> 2013 Report on the Implementation of P.A. 295 Utility Energy Optimization Programs Michigan Public Service Commission. Page 1. Accessed 12/9/2014. [http://www.michigan.gov/documents/mpsc/eo\\_report\\_441092\\_7.pdf](http://www.michigan.gov/documents/mpsc/eo_report_441092_7.pdf). Compare to the data in report from the previous year on page 2:

[http://www.michigan.gov/documents/mpsc/2012\\_EO\\_Report\\_404891\\_7.pdf](http://www.michigan.gov/documents/mpsc/2012_EO_Report_404891_7.pdf)

<sup>vi</sup> Follow the Leaders: Improving Large Customer Self-Direct Programs. Anna Chittum, ACEEE. Page 16-17. Accessed 12/09/2014. <http://www.aceee.org/research-report/ie112>

<sup>vii</sup> Chapter 10: Peak Demand and Time-Differentiated Energy Savings Cross Cutting Protocols. The Uniform Methods Project. Navigant Consulting, NREL. Page 3. Accessed 12/3/2014. <http://energy.gov/sites/prod/files/2013/11/f5/53827-10.pdf>

<sup>viii</sup> Reducing Electricity Demand During Peak Periods. Pennsylvania Public Utilities Commission. Accessed 12/3/2014. [https://www.puc.pa.gov/electric/pdf/DSR\\_FAQ.pdf](https://www.puc.pa.gov/electric/pdf/DSR_FAQ.pdf)

<sup>ix</sup> The Best Value for America’s Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs. ACEEE. Accessed 9/30/2014. <http://aceee.org/research-report/u1402>.

<sup>x</sup> EIA. Accessed 9/30/14. [http://www.eia.gov/forecasts/aeo/electricity\\_generation.cfm](http://www.eia.gov/forecasts/aeo/electricity_generation.cfm).

<sup>xi</sup> Public Opinion Strategies. August 2014. <http://www.mepartnership.org/midwest-voters-support-increasing-energy-efficiency-and-renewable-energy-sources/>

<sup>xii</sup> Public Opinion Strategies. September 2014. [http://www.cleveland.com/business/index.ssf/2014/09/energy\\_efficiency\\_renewable\\_en.html](http://www.cleveland.com/business/index.ssf/2014/09/energy_efficiency_renewable_en.html)

<sup>xiii</sup> J.D. Power 2014 Consumer Engagement Study. <http://www.jdpower.com/press-releases/2014-consumer-engagement-study>.

<sup>xiv</sup> ACEEE. Accessed 7/29/2014. <http://www.aceee.org/files/pdf/policy-brief/eers-04-2014.pdf>.

<sup>xv</sup> DSM Report to General Assembly. Indiana Utility Regulatory Commission. Accessed 9/30/2014. [http://www.in.gov/iurc/files/DSM\\_Report\\_to\\_General\\_Assembly\\_w\\_Cover\\_Letter\\_8-15-2014\(1\).pdf](http://www.in.gov/iurc/files/DSM_Report_to_General_Assembly_w_Cover_Letter_8-15-2014(1).pdf).

This document also draws on points that [Marty Kushler](#) made in his [presentation at MEEA’s 2014 Annual Membership Meeting](#).

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