

2022 DSM Evaluation Findings

Developed for the Xcel Energy Colorado Roundtable
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2022 DSM Evaluations

Residential DSM Evaluations

Energy Savings Kits

Whole Home Efficiency

Home Energy Insights

Commercial & Industrial DSM Evaluations

Energy Management Systems

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Energy Savings Kits: Overall Findings



Respondents reported **high satisfaction** with the product overall. They were least satisfied with the realized energy or bill savings.



Respondents preferred to hear about similar opportunities from Xcel Energy through **email** or **direct mail**, both of which are current outreach methods.



Respondents were very interested in opportunities for **custom kits**. There was also high interest in **additional kit items**.



Just **over a third of respondents had no concerns** about the product prior to participating.



Overall **LED lightbulbs** were the most installed kit item (89.5%, n=68).



Showerheads were the most **uninstalled** item (15.6%, n=7).

Energy Savings Kits: Recommendations

1. Re-evaluate the **communication of expected bill savings** on participants' energy bills that could result from product participation.
2. Provide **additional opportunities (i.e., channels) for customers to request** Energy Savings Kits.
3. Analyze the feasibility of providing **customizable kit options** and implement if feasible.
4. Analyze the impacts of **adding measures** to the Energy Savings Kits Product.
5. **Reframe information provided on other assistance programs** to highlight the advisory role of partner organizations such as Energy Outreach Colorado.

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Whole Home Efficiency: Overall Findings



Retrospective **net to gross ratio estimated to be 0.76**. Influence driven by recommendations from home energy audits and contractors. Free ridership occurred when customers already knew they wanted to conduct projects.



Customers not aware of product processes and bonus rebate. Over half of participating customer respondents **learned of the product from their trade partner**.



Trade partner participation decreased due to removal of LEDs, ability to participate in stand-alone products, misunderstanding of product changes/eligibility, and perception that bonus amount was not motivating.



Near participants **motivated to improve their homes** and were **interested in completing multiple upgrades** within the next few years.

Whole Home Efficiency: Recommendations

1. Assess the feasibility of converting Whole Home Efficiency into a non-resource product that supports the stand-alone residential rebate products to streamline participation for trade partners and customers.
2. Apply a prospective NTGR of 0.83 if product remains a stand-alone product and recommendations are implemented.
3. Engage the implementer to better facilitate connections between trade partners of different specialties so they can support customers.
4. Leverage the implementer to facilitate trade partner trainings, to underscore benefits of the product, clarify product misconceptions, and provide clear updates on product changes.
5. Increase bonus rebate to drive participation and motivate customers to make multiple upgrades.

Whole Home Efficiency: Recommendations (continued)

6. Use multiple outreach channels to highlight resources available to customers to help select projects and connect with trade partners.
7. Increase promotion budget to allow for multi-channel outreach and improve ability to engage customers through high-touch outreach.
8. Leverage audit participants as hot leads by mentioning the bonus rebate during audits and after-audit follow-up.
9. Ask implementer to repeat contacts to audit participants and partial participants to encourage them to install different measure types (like HVAC) and connect them to the appropriate resources.
10. Develop leave-behind marketing for the product during audits/Home Energy Squad visits.

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Home Energy Insights: Overall Findings



Customers reported the Home Energy Report to be within top three **methods for learning about Xcel Energy products** and were curious to learn about additional opportunities beyond energy efficiency.



Customers were **not familiar** with My Energy **Portal**.



On average, customers were **satisfied with Home Energy Reports**. Peer programs are starting to use positive tones to help raise satisfaction levels.



Customers rated the **household energy use** and **consumption information** as **most valuable** features of report.

Home Energy Insights: Overall Findings (continued)



On average, customers found **neighbor compare helpful and motivating**. But those customers who found report confusing, cited the neighbor comparison as most **confusing**.



Customers who did not or **rarely read** reports believed **information to be inaccurate or not useful**.

Home Energy Insights: Recommendations

1. Highlight how customers can complete the home assessment to tailor their home energy report.
2. Improve accuracy and timing of the data used to populate the report.
3. Enhance detailed information on criteria used to determine the comparable “neighbor.”
4. Assess feasibility of offering customers the option to select a self-comparison version of the Home Energy Report.
5. Update report language to a more positive tone.

Home Energy Insights: Recommendations (continued)

6. Update report tips, where possible, for different residence types to make them feel more applicable.
7. Update report to include Xcel Energy offerings outside of energy efficiency.
8. Offer customers more streamlined information on how to access energy use information and information on other products, particularly through leveraging the My Energy portal.
9. Conduct further research on how customers are directed to the My Energy portal.

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Energy Management Systems: Overall Findings



Customers expressed satisfaction with product, reporting **highest satisfaction with the performance of their EMS.**



The application itself was not a barrier, but near-participating customers and nonparticipating trade partners **lacked understanding around eligibility and reasons for rejection.**



EMS is considered familiar technology, but the path to **implementing peak coincident demand management is unclear.**



To grow market, customers and trade partners need help with **workforce development** and **understanding emerging technologies.**



Retrospective **net to gross ratio estimated at 0.75.**

Energy Management Systems: Recommendations

1. Apply prospective NTGR of 0.84 when product design updates are implemented. When participation increases, then re-assess net-to-gross.
2. Increase training for trade partners to improve understanding of how to explain the importance of peak coincident demand management (PCDM) and sell PCDM elements to customers.
3. Increase communication around reasons for rejections, providing trade partners time to adjust projects and make them cost effective.
4. Apply a flat reduction of 50% of EMS project costs to more accurately portray project costs related directly to energy savings and account for incremental project costs like comfort and security not related to energy savings
5. Move forward with plans to make some elements of the EMS product more prescriptive.
6. Ensure best practice documentation policies are widely disseminated and become standard practice.

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Lighting Efficiency: Overall Findings



Covid-19 is still significantly affecting non-participating customers, trade partners and peer utilities essentially stalling market transformation.



Retrospective product influence was **0.81 and** recommended prospective influence is **the same**.



Many peer utilities are not expected to apply NTGR as long-term programs are considered **part of the market** and customers have difficulty differentiating **product influence**.



Trade partners **drive the most customers** to participate in the Lighting Efficiency Product and would like more communication and training from Xcel Energy.

Lighting Efficiency: Overall Findings (continued)



Peer utilities high level program **design is similar** to Xcel Energy's, however **wide variations in specifics** occur.



Networked lighting controls across peer utilities have slow uptake as **customers are unaware** and **trade partners are uncomfortable** with the technology.



Customers and trade partners **expressed a desire** for a broader array of eligible products.



Customers and trade partners expressed concern about the **complexity of applications** (particularly custom) and try to avoid custom projects.

Lighting Efficiency: Recommendations

1. Continue **monitoring incremental costs and maintain incentives** that are, in aggregate, at a similar proportion (or higher) of incremental cost.
2. Develop an enhanced understanding of which **business segments are lagging in LED** installation and target the program to encourage participation by customers who have less evidence of naturally occurring adoption.
3. Discuss the **value of continuing to research and apply NTGR** for savings versus focusing research on improving program design in future strategic issues conversations with stakeholders.
4. Assess the **feasibility of adding new prescriptive measures** suggested by trade partners and promoting these new measures added.

Lighting Efficiency: Recommendations (continued)

5. Provide additional **trade partner trainings** and regular opportunities for **engaging with Xcel Energy staff**.
6. Look for ways **to simplify the application process** for customers and trade partners.
7. Assess the **pros and cons** for program design variations at peer utilities to see if any changes could benefit the Product.
8. Increase **marketing, training, and visibility** of network lighting technology for the Product.

Thank You

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