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Small Commercial Customer Energy Efficiency Barriers and Opportunities

**A qualitative exploration of implementation barriers:
Executive Summary**

August 2011

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EXECUTIVE SUMMARY

Small business customers comprise a market sector that is notoriously difficult to reach for energy-efficiency programs. Commonly accepted barriers for greater participation include small business customers' limited time, inadequate knowledge of energy efficiency and restricted capital resources with which to act upon cost-effective energy efficiency improvements. Energy Center of Wisconsin research staff undertook an investigation to determine whether there is something more behind these assumptions that could aid cost-effective program design.

The Small Commercial Barriers and Opportunities project was offered by the Energy Center of Wisconsin in response to the interest of members in having a better understanding of: (1) energy efficiency opportunities in the small commercial sector, and (2) the barriers to implementing these opportunities. The primary goal of this qualitative research study was to identify the barriers and motivators that prevent or encourage small commercial customers from implementing energy efficiency improvements, including the barriers to upgrading the end uses that offer the greatest energy-saving potential. With structured communication and investigation into the decision-making processes and motivations of small commercial customers, the project sponsors hope to gain insight that will aid in overcoming these barriers. Alliant Energy, Minnesota Power, Wisconsin Public Service, WPPI Energy, and Xcel Energy elected to participate in this joint member project.

Our study reveals that for the most part, the conventional assumptions are true. Interviews with 46 small business customers, following comprehensive energy efficiency reviews, reveal that the greatest barrier to energy efficiency is competing priorities, followed by (in descending order): lack of capital, waiting for equipment to fail and the need for a better or specific payback. While closely related to the aforementioned energy efficiency implementation barriers of limited time and inadequate knowledge, the barriers we identified are distinctly different. Deeper understanding of these perceived hurdles offers the chance to refine the strategies and tactics used in energy efficiency programming, to result in greater participation and savings impacts.

Competing priorities

Nearly 20 percent of the cited barriers involved competing priorities. Energy and energy efficiency do not appear to rise above the customer service, staffing needs, administration, daily operation and other responsibilities related to running a small business. One must consider, then, how to raise the importance of energy on the priority list.

Most successful small business owners are highly attuned to providing good customer service. One solution is to link energy efficiency to a human interaction requiring the owner's attention—like that of a customer waiting at the counter for service. In many cases, direct service of customers is what the small business is set up to handle. This offers a natural fit for a customer touch point with an alternative purpose. Although owner face time is challenging to get, a personal visit from a contractor or utility representative demands that the small business owner pay attention to the energy efficiency message. Plus, the message can be made more engaging by incorporating the customer's own energy usage data with life-cycle costing analysis.

Lack of capital

Upon deeper questioning, in many cases it is not the lack of capital that is the small business barrier, but rather the timing of the firm's *cash flow*. Of 24 responses citing a lack of financial resources as the reason they have not implemented energy efficiency measures, 14 responses specifically referred to cash flow as the core issue. Small business owners have financial resources. They simply manage their cash flow more tightly. This suggests that alternative financing models, perhaps with significant buy downs or with repayment schedules that vary with cyclical business cash flow, may move some small business owners to act upon energy efficiency improvements.

Waiting for equipment to fail

Many respondents offered that it was both their business policy and practice to replace equipment only when it failed. This suggests that early replacement programs must offer equipment with significant performance or quality improvements. In addition, rebates must be high—perhaps up to 75 percent¹ or more of the improvement cost—to mitigate the barriers of complexity; impact on product, process or customers and the hassle of obtaining quotes and finding a contractor.

Need for a better or specific payback

Many participants used simple payback as a decisive factor. Life-cycle costing is a more all-encompassing method with which to evaluate the cost effectiveness of energy efficiency improvements than simple payback. Simple payback does not illustrate any difference between two improvements with the same payback but substantially different life expectancies. Although a number of interviewees mentioned the need for a better (faster) or specific payback (e.g., two years) as a barrier to implementation, a better understanding of the cost benefits that will accrue over the lifetime of the technology may assist small business owners in their evaluation. This requires the provision of the improvement life for any opportunities or improvement measures identified in an energy efficiency audit.

In conclusion, learning more about the formidable challenges faced by energy efficiency programs trying to engage small business customers, as well as those faced by the small business owners themselves, will aid utilities in overcoming barriers to energy efficiency for this diverse market segment. An integrated approach, leveraging personal contacts, comprehensive energy efficiency audits, personalized information and “mass” customization, will aid in moving small business customers from energy efficiency unawareness, to ideation, to consideration and finally, to implementation.

¹ *National Energy Efficiency Best Practices Study*, Volume NR-1- Non-Residential Lighting Best Practices Report, Quantum Consulting, December 2004; http://www.eebestpractices.com/pdf/BP_NR1.PDF

The Energy Center of Wisconsin's *Energy Efficiency and Customer-sited Renewable Resource Potential in Wisconsin: For the years 2012 and 2018*. 2009 suggested that incentives may need to be as high as 90 percent.