



Synapse
Energy Economics, Inc.

Commercial & Industrial Customer Perspectives on Massachusetts Energy Efficiency Programs

Prepared for the Massachusetts Energy
Efficiency Advisory Council

April 3, 2012

Tim Woolf, Jennifer Kallay, Erin Malone,
Tyler Comings, Melissa Schultz, and Janice Conyers

Brightersy Exhibit No. 506
Date 1-12-16 Reporter TLJ
File No. EO-2015-0240
EO 2015-0241



485 Massachusetts Ave.
Suite 2
Cambridge, MA 02139

617.661.3248
www.synapse-energy.com

level and stated that they either will participate or are considering participating in programs in the next few years.¹⁶ In general, the customers we interviewed consider energy efficient equipment regularly when they make purchasing decisions.

Another theme we heard from most of our interviews was that payback period is the main criteria for evaluating energy efficiency investments and that energy efficiency investment payback periods compete with the payback periods for other capital investment projects. The payback threshold for moving forward with energy efficiency investments was remarkably consistent across industries and regions. Most customers require projects to have payback periods of four years or less. However, projects with payback periods of three to four years are rarely approved. Projects with payback periods of two to three years are sometimes considered, but approval is uncertain and depends largely on the economics of the other projects that are competing for capital in a given year. A project with a payback of two years or less is typically considered to be worthwhile and is approved.

A third theme we heard from many customers we interviewed was that capital constraints are a key barrier to moving forward with energy efficiency projects. All projects that are submitted (whether they are related to energy efficiency and energy consuming equipment replacement or not) compete for capital investment dollars using payback as the key criteria and taking into the account the nature of the need for the project. Energy efficiency investments are frequently categorized as discretionary, not required, expenditures.

A fourth theme is that the general process for vetting and approving energy efficiency investments is similar across many customers. Projects are scoped, analyzed, and proposed on an annual basis and submitted to a higher level team for review and approval.

A fifth theme is that financing mechanisms, such as loans, are seldom, if ever, used. Instead, customers primarily use available capital to pay for their energy efficiency investments, supplemented by the contributions from the energy efficiency programs. A sixth theme is that many customers were generally confused by the number of different energy efficiency program administrators in the market and what each provider could provide. Some customers had facilities served by both municipals and utilities. Also, some customers mentioned that they were also working directly with ESCOs, renewable installers, and manufacturers/distributors of lighting products, among other third parties.

It is clear from even our small sample that there are many different types of customers with different needs and barriers to participating in energy efficiency programs. For example, some customers are proactively looking for energy efficiency opportunities, prefer to scope an energy efficiency project using their own internal resources, and prefer to obtain program administrator resources with little technical support from the program administrators. Other customers do not have the resources to be proactive and scope projects, and prefer regular contact from program administrators on program offerings and savings opportunities. This diversity of customers creates a significant challenge for program administrators, because reaching additional customers and achieving deeper levels of savings per customer will likely require offering program technical and financial

¹⁶ Specifically, when asked whether a customer plans to participate in the efficiency programs within the next three years, 27 customers said "yes," 2 said "no," and 7 said "maybe." The four additional customers that completed the questionnaire but not the interview all indicated "maybe."