



## Memorandum

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**CC:** Jennifer Morris, David Brightwell, ICC Staff; Celia Johnson, Illinois SAG; Stu Slote, Jeff Erickson, Kevin Grabner, Patricia Plympton, Guidehouse

**From:** Bridget Williams, Jean Rokke, Guidehouse

**Date:** February 3, 2021

**Re:** Income Eligible Multi-Family Energy Savings Program Process Evaluation

### EXECUTIVE SUMMARY

Guidehouse evaluated the Income Eligible Multi-Family Energy Savings Program (IEMS) that is provided by ComEd and Peoples Gas (PGL) and North Shore Gas (NSG) companies and is implemented by Elevate Energy (Elevate). The program offers direct installation of energy efficiency measures and replacement of inefficient equipment, as well as educational information to multi-family facilities. This evaluation addressed the IEMS program focusing on two main topics:

- What are property managers' and building owners' perspectives and overall satisfaction with the program?
- What are the barriers to participation for building owners and property managers?

Guidehouse found the program is well received by the property owners who appreciated the ease of participation along with the zero cost for the building assessment and measures. Guidehouse found areas to improve the program, such as helping the property owner understand their savings and expanding the measures they address. The Findings and Recommendations of the evaluation are:

**Finding 1.** Property managers were unsure of the savings the program provided.

**Recommendation 1.** Provide the property managers with a tool and training on how to calculate and track the savings resulting from efficiency improvements made to their buildings.

**Finding 2.** Some property managers were unsure if the investment they made in new equipment had the financial benefits as forecasted in the assessment report.

**Recommendation 2.** Consider developing a follow-up assessment program for the facilities that made additional capital improvements to identify the level of savings realized.

**Finding 3.** The incentives provided for appliance replacements is not large enough to meet the property managers return on investment criteria.

**Recommendation 3.** Where possible, increase the incentive levels for the various recommended appliances and measures to reduce the payback periods for the property managers.

## METHODOLOGY

In June and July, Guidehouse interviewed eleven participants of ComEd, PGL, and NSG's Income Eligible Multi-Family Energy Savings program to gather their thoughts and insights regarding the strengths of the program and to identify areas for improvement. These participants represented all three utilities and the various components of the program, as seen in Figure 1.

The major topics of the interviews included

- Operation of the program
- Efficiency measures installed
- Project financing
- Project installation

**Figure 1. Breakdown of Participant Demographic and the Participation Component<sup>1</sup>**

Demographic/Component	Interview Goal	Actual Interviews
Peoples Gas Customer	3	6
North Shore Gas Customer	3	1 <sup>2</sup>
Direct Installs	2	6
Capital Measures	2	3
Top 10 percent	3	3
Bottom 10 percent	2	2
<b>TOTAL INTERVIEWS</b>		<b>11</b>

<sup>1</sup> There were eleven interviews conducted. One of the interviews was with two regional managers of a national organization. There were four ComEd/Nicor only sites interviewed; if their responses differed significantly from the PGL and NSG responses, they were not included.

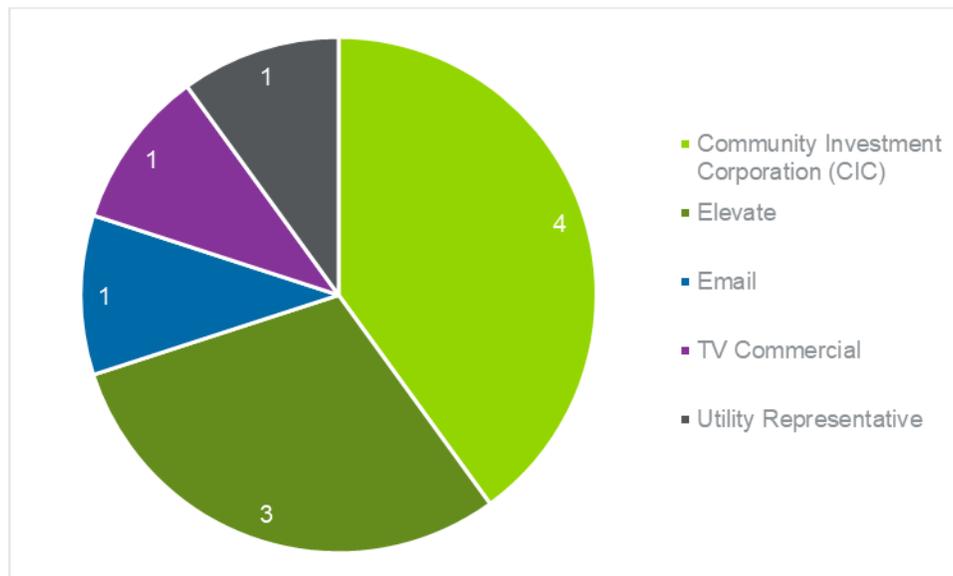
<sup>2</sup> There were three possible North Shore Gas projects. One participant declined the interview and the second participant was not available during the interviewing time period.

## PROGRAM PERCEPTION

### Awareness and participation

The Community Investment Corporation (CIC) and Elevate were the two primary sources for participants to learn about the program. The CIC conducted seminars for property managers where Elevate would present the program and the benefits it provided. For other participants, their CIC financed loan terms required an energy efficiency compliance portion that Elevate managed.

**Figure 2. Source of Participant Awareness (n=10)**



Source: Guidehouse research

The financial benefits of the program from both a capital and operating perspective were the primary motivators for participation. Many of the upgraded buildings were self-reported “older” with below standard insulation and equipment, therefore having a low cost means of upgrade was a welcomed solution. The operation of some facilities’ boilers was also outdated with the property managers having to continually adjust timers to control the heat and save money. By installing boiler controls and pipe insulation, they not only saved money but improved the comfort of the building as well.

The main capital and operating costs that participants sought assistance with were:

- Updating boiler controls
- Insulation
- Upgrading lighting fixtures
- Reducing the cost of utility bills

Two of the interviewees mentioned the non-energy benefits of reducing their environmental consumption and carbon footprint. One large participant belonged to the Better Buildings Challenge and another external voluntary group. They pledged to reduce their environmental consumption portfolio-wide by 20% over a ten-year period regardless whether the property owner or tenant paid the utility bill.

The participants all felt the program improved their buildings and met their overall objectives. However, a couple participants were unsure if the program helped to reduce their energy bills as they had not seen a significant change in their energy bill.

## Prior planning of upgrades

The program influenced all the participants to some level. Most of the participants had the intention of improving the efficiency of their buildings and some were slowly making improvements such as replacing steam traps and interior and exterior lights with LEDs prior to participating in the program. But it was the availability of the program, the low-cost, and the ease of participation that motivated them to make or accelerate the improvements to their whole facility.

For the remaining interviewees, one knew they were going to upgrade their facility but chose to participate in the program to receive the guidance from Elevate as to which options and measures to install; and three of the interviewees felt the energy efficiency improvements were cost prohibitive and would not have made any upgrades in the absence of the program.

## Measure implementation

Participants appreciated the program measures that were free and only required the property staff's onsite presence for installation. These measures helped the facilities reduce their energy usage while improving the comfort of the common areas of the building and the tenant units.

When the recommended measures involved a financial investment from the participant, the property managers considered additional factors and prioritized their decision making. The factors participants considered were the:

- Cost effectiveness of the measure
- Payback periods of three to five years
- Benefit to the tenant
- Program certification of installers
- Equipment reviews from other purchasers
- Compatibility of the fixture and lamp with the buildings architectural design

## PROGRAM SATISFACTION

All ten participants were extremely satisfied with the program components, ranking all of them on average 9 or higher on a 0-10 scale where 0 is not at all satisfied to 10 is extremely satisfied (Figure 3).

**Figure 3. Average Satisfaction\* Scores**

Program Component	Average Rank (0-10 scale)	n
Energy assessment of your building	9.2	10
Elevate Energy Analyst explanation of the energy assessment	9.25	9
Service you received from your service provider	9.4	10
Energy assessment report	9	9
Energy savings	9.3	8
Product installed by your service provider	9.7	10

\* Satisfaction ranking on a 0-10 scale where 0 is not at all satisfied to 10 is extremely satisfied.  
Source: Guidehouse research

The participants said they would install the program's energy efficient equipment in their other buildings. They appreciated the ease of participation along with the zero cost for the building assessment, showerheads, faucet aerators, programmable thermostats, pipe insulation and ENERGY STAR® certified LEDs. One property manager summarized the customer's perspective when they said:

*"The biggest part of the program we have appreciated is the turn-key services aspect of the program that Elevate Energy provides. When we work with Elevate, they take the work off our plate, they are the ones doing the audits, putting the contracts together with the implementers, processing the rebate paperwork – all of that on the back-end making our jobs easier. This aspect of the program is underrated. That is the day-to-day management we don't have to do, and I appreciate that.*

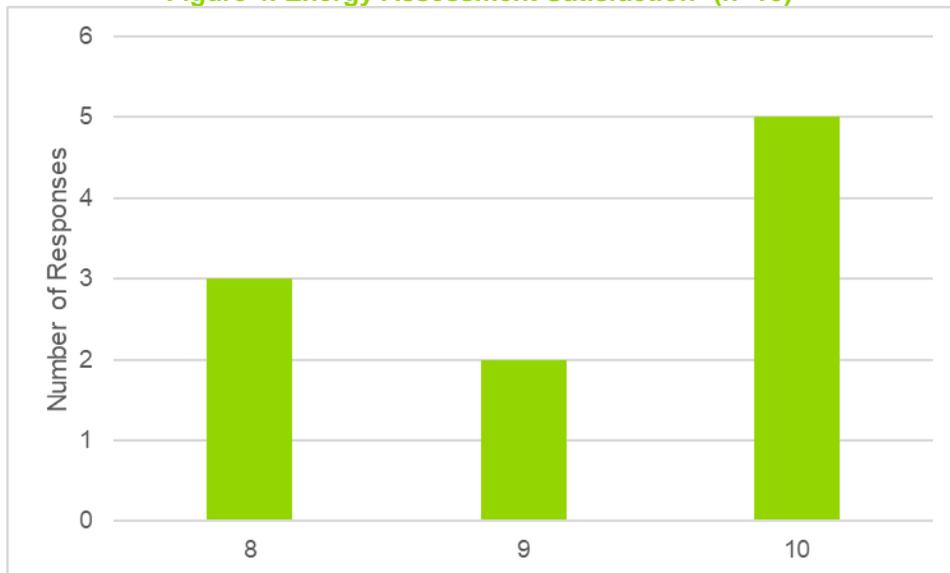
*We are more generalists, in addition to doing all of those things, they have the knowledge to spec out the right product and work with the implementers to install those products. The LED market is constantly changing and evolving, so to have Elevate's knowledge on the latest product options is very helpful to us. Their expertise is very helpful."*

## Satisfaction with the energy assessment and the assessment report

The participants were very satisfied with their Elevate Energy Analyst, the free assessment they performed (Figure 4), and the report of their findings (Figure 5). They found the comprehensive report was well organized and easily understood. The detailed findings identified—by measure—the covered cost, incentive levels, and any out-of-pocket cost for each of the recommendations. The comprehensive report made the decision-making process for the property managers relatively easy.

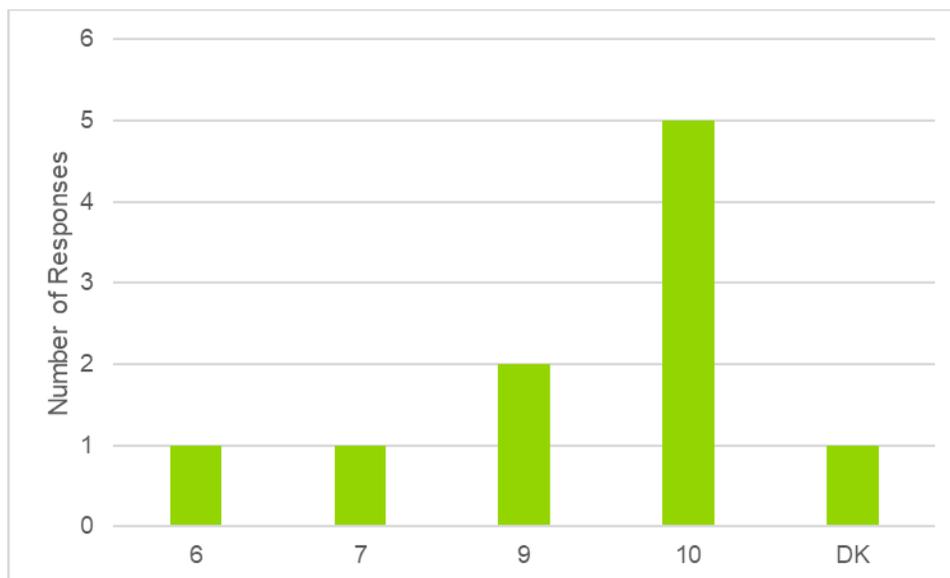
While the property managers were happy with the report overall, they did provide feedback on possible improvements. One property manager wanted a full energy assessment of their facility including refrigerators, large mechanical, and wall air conditioners. Another property owner suggested a follow-up assessment for participating properties, comparing the projected savings to the actual savings. While they thought the changes reduced their energy costs, there were other variables such as changes in the number of tenants, their usage, and the weather that made a clear analysis for the property owner difficult.

**Figure 4. Energy Assessment Satisfaction\* (n=10)**



\* Satisfaction ranking on a 0-10 scale where 0 is not at all satisfied to 10 is extremely satisfied.  
Source: Guidehouse research

**Figure 5. Energy Report Satisfaction\* (n=10)**



\* Satisfaction ranking on a 0-10 scale where 0 is not at all satisfied to 10 is extremely satisfied.  
Source: Guidehouse research

## Satisfaction with the Installer and the efficient measures

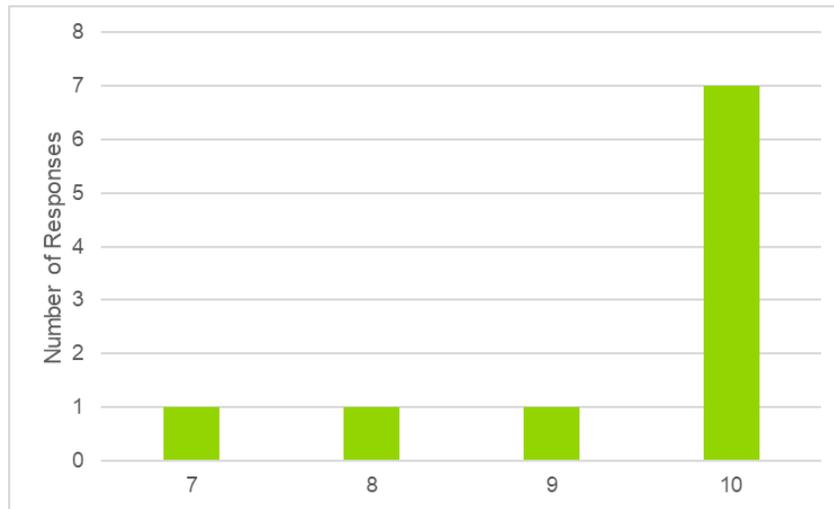
The property managers were very satisfied with the installing contractors (Figure 6), with all interviewees saying there were no major issues in the installation of the equipment. They described the installers as organized, professional, and courteous. While most of the respondents said the length of time needed to install the equipment was reasonable and that it did not disrupt their work schedule, one respondent noted that their building was without heat for 30 days while waiting for the installation of a boiler.<sup>1</sup>

For the sites installing measures in the apartments, most tenants chose to participate in the program. Some tenants who could not be home when the installation occurred chose to opt out. The property managers thought the installation crews were respectful of the tenants, answering any questions they had. One property manager was dissatisfied that the technicians who replaced the steam traps did not consistently wear booties in the tenant's apartments.<sup>2</sup>

<sup>1</sup> The respondent clarified that while they were without heat for 30 days, it was not due to something the program implementer could have addressed. The building was being renovated and it took some time to dismantle the old boiler, conduct asbestos remediation and install the new boiler.

<sup>2</sup> The customer gave consent to be contacted by the program implementer to discuss this matter.

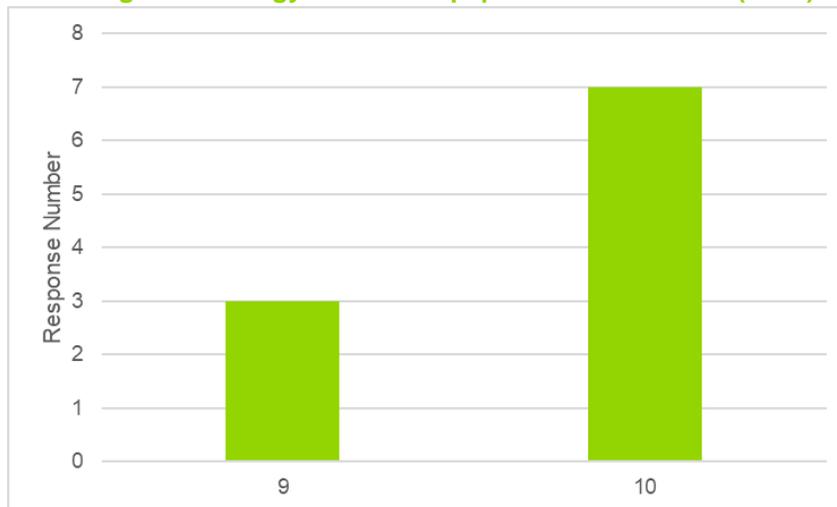
**Figure 6. Installer Satisfaction\* (n=10)**



\* Satisfaction ranking on a 0-10 scale where 0 is not at all satisfied to 10 is extremely satisfied.  
Source: Guidehouse research

The property managers were also satisfied with the equipment installed (Figure 7), appreciating that the new equipment provided consistent heat throughout their building while helping them save on their energy costs. One senior housing facility liked that the program allowed them to select the types of lamps with color temperatures that better fit their older tenants' lighting needs. Finally, one property manager did comment that some of their LED lamps were burning out within the first year of installation.<sup>3</sup> Another asked if there could be options on the smart strips offered because they need more of the “always on” slots, not the “manual”.

**Figure 7. Energy-Efficient Equipment Satisfaction\* (n=10)**



\* Satisfaction ranking on a 0-10 scale where 0 is not at all satisfied to 10 is extremely satisfied.  
Source: Guidehouse research

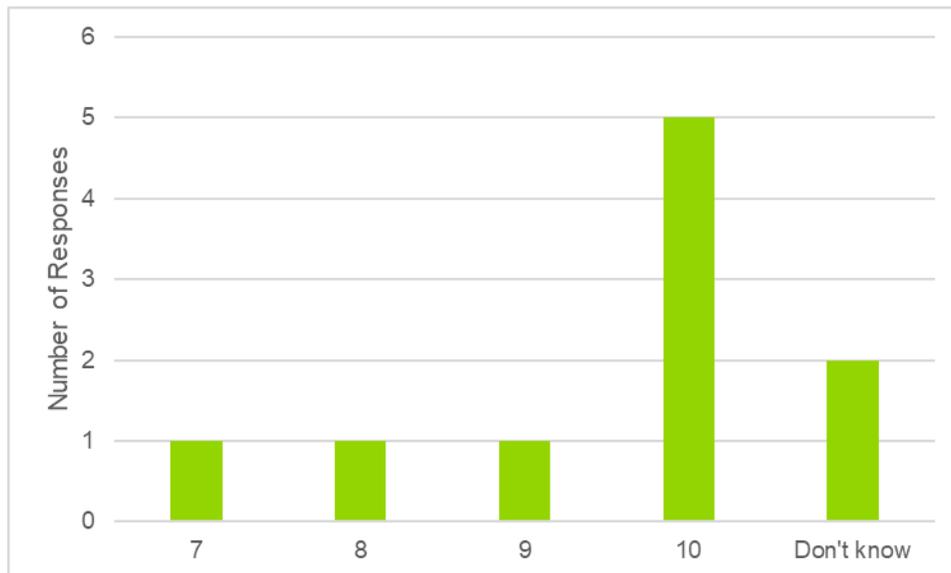
<sup>3</sup> The implementation contractor responded that this is not uncommon and they have a 1 year warranty on all lighting.

## Satisfaction with the energy savings

While the property managers ranked their satisfaction high for the program provided energy savings (Figure 8), many of them were not sure how much they were actually saving. This uncertainty was due to different factors. For some buildings the electric bill includes both tenant and common spaces. In these cases, while the property manager can assume the LEDs are using less electricity in the common areas, they did not know how to quantify it. For another building, the property manager mentioned that he did not see any savings the first few months after participating but has seen sizable savings for the past six months and is not sure what changed to cause the savings.

The remaining property managers did see energy savings resulting from the upgrade program and felt the changes improved the value of their properties. One property manager appreciated receiving the predicted savings from Elevate as they rarely receive them from the other companies they worked with. They consider the before versus after weather normalized savings in the energy reports. Having the predicted savings allowed them to determine if there were actual savings or not.

**Figure 8. Energy Savings Satisfaction\* (n=10)**



\* Satisfaction ranking on a 0-10 scale where 0 is not at all satisfied to 10 is extremely satisfied.

Source: Guidehouse research

## Project Funding

Only one property owner received funding from the Community Investment Corporation. Energy efficient upgrades to their building in partnership with Elevate were part of their original loan agreement. They have been working with the CIC for over 15 years and have always had a positive experience, ranking their satisfaction a 10.

## Barriers to participation

As mentioned earlier, the low cost/no cost aspect of the program is very appealing to participants. No one felt there were any drawbacks to the program. When asked if there were any drawbacks, one respondent said,

*"None, it's a win-win. A small way to save the whole world and not waste energy."*

While none of the property owners felt there were barriers to participating in the program, one did mention the recommendations for replacement of appliances was cost prohibitive. They were very sensitive to the payback period and could not justify replacing the furnace based on the amount and timing of the realized savings.

## FINDINGS AND RECOMMENDATIONS

**Finding 1.** Property managers were unsure of the savings the program provided.

**Recommendation 1.** Provide the property managers with a tool and training on how to calculate and track the savings resulting from efficiency improvements made to their buildings.<sup>4</sup>

**Finding 2.** Some property managers were unsure if the investment they made in new equipment had the financial benefits as forecasted in the assessment report.

**Recommendation 2.** Consider developing a follow-up assessment program for the facilities that made additional capital improvements to identify the level of savings realized.

**Finding 3.** The incentives provided for appliance replacements is not large enough to meet the property managers return on investment criteria.

**Recommendation 3.** Where possible, increase the incentive levels for the various recommended appliances and measures to reduce the payback periods for the property managers.

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<sup>4</sup> The implementation contractor noted that if the property is regularly conducting energy benchmarking in ENERGY STAR Portfolio Manager, that is one way to track savings over time. This type of benchmarking is required for all large properties located in the City of Chicago and for medium and large properties located in the City of Evanston by local ordinance. They also noted many of the buildings served by the IEMS program will be smaller in size and/or located outside of these areas and other tools will need to be considered.