



# COMMERCIAL LIGHTING SURVEY Results | Presented April 6, 2022

## Lighting Action Group & Xcel Energy Meeting

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# Opening Discussion Topics

Presented by the EEBC Lighting Action Group [LAG] [15 min]

## We got together to understand Xcel Energy's perspectives and to explore:

- Where is the market and DSM Programs going in next 5 to 10 years?
- Where are the lighting opportunities? Especially with BE?
- When and how plan to get there?
- What would help accelerate energy savings for your DSM programs?
- How can EEBC/LAG help?

**Survey Purpose:** To prioritize and anticipate lighting opportunities, based on realities in the field and the assumptions above. Then share these findings to encourage utility collaboration discussions that help align incentives and our delivery in the marketplace.

# Respondents

## Colorado Lighting Industry Professionals

### Respondents = 23

(Taken mostly before *Residential Time of Use* mailings)

- Primarily EEBC members (91%)
- Lighting Business Owners, Contractors, ESCOs, Distributors, etc.
  - Knowledgeable Respondents (N = 23)
    - Owner/President/VP/CEO/COO 61%
    - Director/Manager 30%
    - Other (Engineer, Consultant) 9%
- All involved in Commercial Lighting Retrofit projects and participate in Xcel Energy's Rebate Programs (Prescriptive, Instant, Custom)
- Some also involved in commercial new construction and multifamily projects



# Survey Metrics

- **Conducted** 12/2/21 – 3/31/22
  - 20 rebate topics covered, based on monthly “brainstorming”- like discussions among EEBC lighting industry members from July- November 2021
- **Metrics Used**
  - Relevance to business (Yes or No)
  - Importance (Rating given if respondent answered “Yes” to relevancy)
  - To rank issues, calculated a score of Relevance x Importance
- **Plus** one open-ended question re: *‘the most vital rebate-related action Xcel Energy could take that would positively impact your business’*





## Survey Results

# Action Group Rebate Recommendations



# Top-Ranked Survey Responses

## Review for Utility Interest & Priorities

1. **Increased rebate amounts for Custom rebate applications**, equivalent to Prescriptive rebate amounts for similar projects **[93.0]**  
 [and related]: **Improved clarity and predictability of Custom rebates**; (e.g., fixed amount based on kW savings, regardless of payback time frame) **[92.0]**
2. **Increased rebates for INTERIOR standalone controls** **[88.0]**
3. **Increased rebates for EXTERIOR fixtures** (wall packs, area lights, etc.) **[87.0]**
4. **Rebate bonuses for more efficient fixtures** (e.g., DLC Premium, >125lm/W, etc.) that could cost more, but use fewer watts for the same or greater output. On-bill financing for commercial customers, including smaller businesses **[85.1]**
5. **Higher rebates for troffer, linear, high bay, and other retrofit kits** **[84.9]**
6. [Tie] - **Increased rebates for EXTERIOR standalone lighting controls** (e.g., occupancy/motion sensors with bi-level dimming) **[84.0]**
7. [Tie] - **Increased rebates for NETWORK lighting controls** **[84.0]**

NOTE: Score derived by multiplying the number of Relevance 'Yes' (range 9-23) x Average Importance Rating (range 3.07 – 4.43)

# Trend Findings

## Current Program - 5 Top Survey Themes

1. Improving and simplifying the Custom Rebate Program
2. Strong potential for and interest in controls (interior, exterior, network)
3. Growing importance of exterior & night-time efficient lighting.
4. Greater rebates for greater efficiency (which often costs more)
5. On-bill financing (very important for most)  
- seen as having a great potential to accelerate LED conversions.

These themes were emphasized or repeated in a number of the open responses.



# Trend Findings

## Future Program Ideas – 3 Emergent Themes

1. Strong support for helping Xcel Energy achieve its energy efficiency and carbon-reduction goals
2. High interest/concern about, and sense of urgency regarding shift to electrification and impact on the grid, DSM, and how we can help
  - “Peak demand” changing? – EV’s, electrification of heating, etc.
  - Desire to be proactive with efficient lighting, to anticipate and be prepared for future trends and changes
3. Limitations of Prescriptive Program’s inflexibility
  - For example:
    - a) Relying on DLC classifications when same fixture can have multiple applications,
    - b) Wattages below prescriptive program minimum for category





## DISCUSSION | BRAINSTORMING



# Mid-Ranked Survey Responses

## Review for Utility Interest & Priorities

1. ***Higher Instant rebates for retrofitting existing fixtures to use LED lamps*** (e.g., T8s, T5s, Mogul-base), which involves electrical labor [79.0]
2. ***On-bill financing for commercial customers, including smaller businesses*** (i.e., installment payments for projects can be included in customers' bills) [79.0]
3. ***Increased rebate amounts for linear ambient fixtures*** [73.0]
4. ***Expand rebates to fixtures whose wattages fall below the lowest tier in their category in the Prescriptive application*** (e.g., high/low bays <75W, stairwell fixtures <20W, canopy or garage fixtures <25W) [69.0]
5. ***Rebate bonuses for de-fixturing and smarter lighting design using fewer LED fixtures than traditional lighting being replaced.*** [64.1]
6. ***Increased Instant Rebate amounts for all LED lamps*** [63.9]



# Lower-Ranked Survey Responses

## Review for Utility Interest & Priorities

1. ***Initiate rebates for solar-powered (off-grid) fixtures [59.0]***
2. ***Prescriptive rebates for efficient horticultural lighting [57.0]***
3. ***Rebate bonuses for lighting that operates fewer hours, but all during peak demand times [49.1]***
4. ***Rebate bonuses for de-lamping***  
(using fewer lamps when retrofitting fixtures to LED) **[46.0]**
5. ***Rebate bonuses based on Non-Energy Benefits (NEBs)***, such as long product warranty, fixture serviceability, cradle-to-cradle waste reduction/recyclability, less-toxic components, full-cutoff compliance for exterior fixtures **[36.8]**
6. ***Higher rebates to replace fluorescent T8s vs. T12s because of the longer payback timeframe for T8s [34.0]***





## DISCUSSION | BRAINSTORMING

Thank You





## APPENDIX

# DATA ANALYTICS ADDITIONAL DETAILS

Isolating Relevance and Importance



# Item Relevance

Rank order - % “Yes” > 75%, (13/20 items):

- 1) 100% - Rebate bonuses for more efficient fixtures (e.g., DLC Premium, >125lm/W, etc.) that could cost more, but use fewer watts for the same or greater output.
- 2) 96% - Higher rebates for retrofit kits
  - Increased rebates for INTERIOR standalone controls
  - Increased rebates for EXTERIOR standalone controls
- 3) 91% - Increased rebates for network lighting controls
  - Improved clarity and predictability of Custom rebates (e.g., fixed to kW savings, regardless of TRC)
  - Increased rebate amounts for custom rebate applications (Prescriptive parity)
- 4) 87% - Increased rebates for Exterior fixtures
  - Increased rebates for linear ambient fixtures
- 5) 83% - Higher Instant Rebates for retrofitting existing fixtures (e.g., T8s, T5s, mogul-base)
  - Expand rebates to fixtures with wattages below lowest tier in their Prescriptive category
- 6) 78% - Rebate bonuses for de-fixturing/smarter design using fewer LED fixtures than lighting being replaced.
  - On-bill financing for commercial customers, including smaller businesses



# Remaining Items' Relevance

- 74% - Increased instant rebates for all lamps
  - Prescriptive rebates for efficient horticultural lighting
- 70% - Initiate rebates for solar-powered fixtures
- 65% - Rebate bonuses for lighting that operates fewer hours, but all during peak demand times (M-F, 9-5, or as defined by utility. May require smart meters, affidavit or verification of operating hours)
- 57% - Rebate bonuses for de-lamping (using fewer lamps when retrofitting fixtures to LED)
- 52% - Rebate bonuses based on Non-Energy Benefits (NEBs), such as long product warranty, fixture serviceability, cradle-to-cradle waste reduction/recyclability, less-toxic components, full-cutoff compliance for exterior fixtures.
- 39% - Higher rebates to replace fluorescent T8s vs. T12s because of the longer payback timeframe for T8s



# Item Importance: Average Rating on 5-pt Scale

*How relevant or important is the item for your business?*

- 1 = Very low importance
- 2 = Somewhat low importance
- 3 = Moderate importance
- 4 = Somewhat high importance
- 5 = Very high importance

1. 4.43 - Increased rebate amounts for custom rebate applications (Prescriptive parity)
2. 4.39 - On-bill financing for commercial customers, including smaller businesses
3. 4.38 - Improved clarity and predictability of Custom rebates (e.g., fixed to kW savings, regardless of TRC)
4. 4.35 - Increased rebates for EXTERIOR fixtures (wall packs, area lights, etc.).
5. 4.16 - Higher Instant rebates for retrofitting existing fixtures to use LED lamps (e.g., T8s, T5s, Mogul-base), which involves electrical labor.
6. 4.00 - Increased rebates for INTERIOR standalone controls
7. 4.00 - Increased rebates for network lighting controls
8. 3.86 - Higher rebates for troffer, linear, high bay, and other retrofit kits
9. 3.82 - Increased rebates for EXTERIOR standalone controls
10. 3.78 - Higher rebates to replace fluorescent T8s vs. T12s because of the longer payback timeframe for T8s
11. 3.76 - Increased Instant Rebate amounts for all LED lamps
12. 3.70 - Rebate bonuses for more efficient fixtures (e.g., DLC Premium, >125lm/W, etc.) that could cost more, but use fewer watts for the same or greater output.