



**ECONOLER**

# **Making the Shift: Lessons Learned in Moving from a Resource Acquisition Evaluation Framework to a Market Transformation Framework in Commercial Lighting**

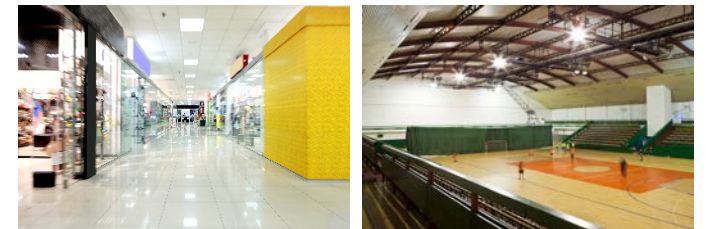
**Jillian Mallory**



# BACKGROUND

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- Hydro-Quebec invested over \$900 M in EE from 2003-2015 in C&I sector with large investment in lighting
- Past evaluations indicated that market transformation savings resulted from HQ activities.
- Assignment: Evaluate market transformation savings for 2012-2016



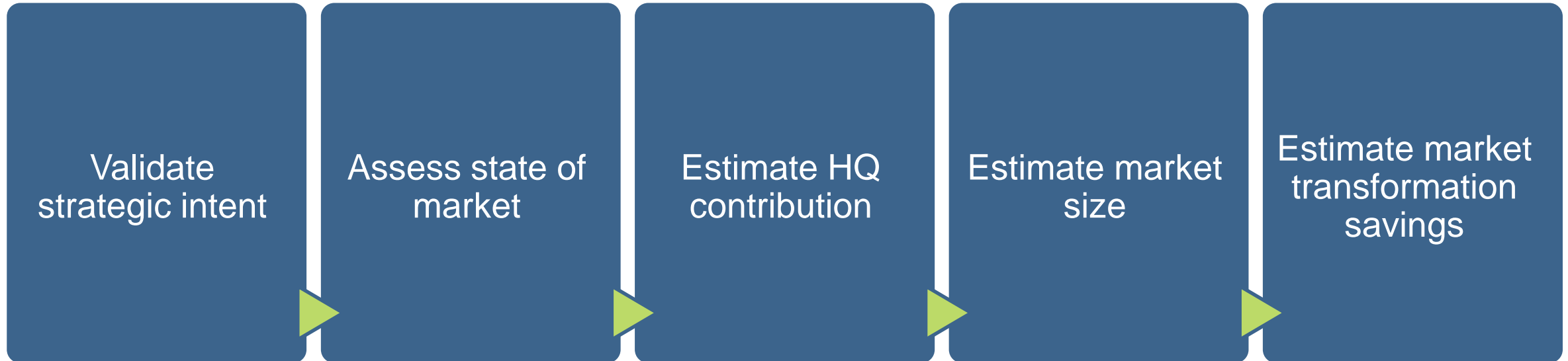
# OUR CHALLENGE

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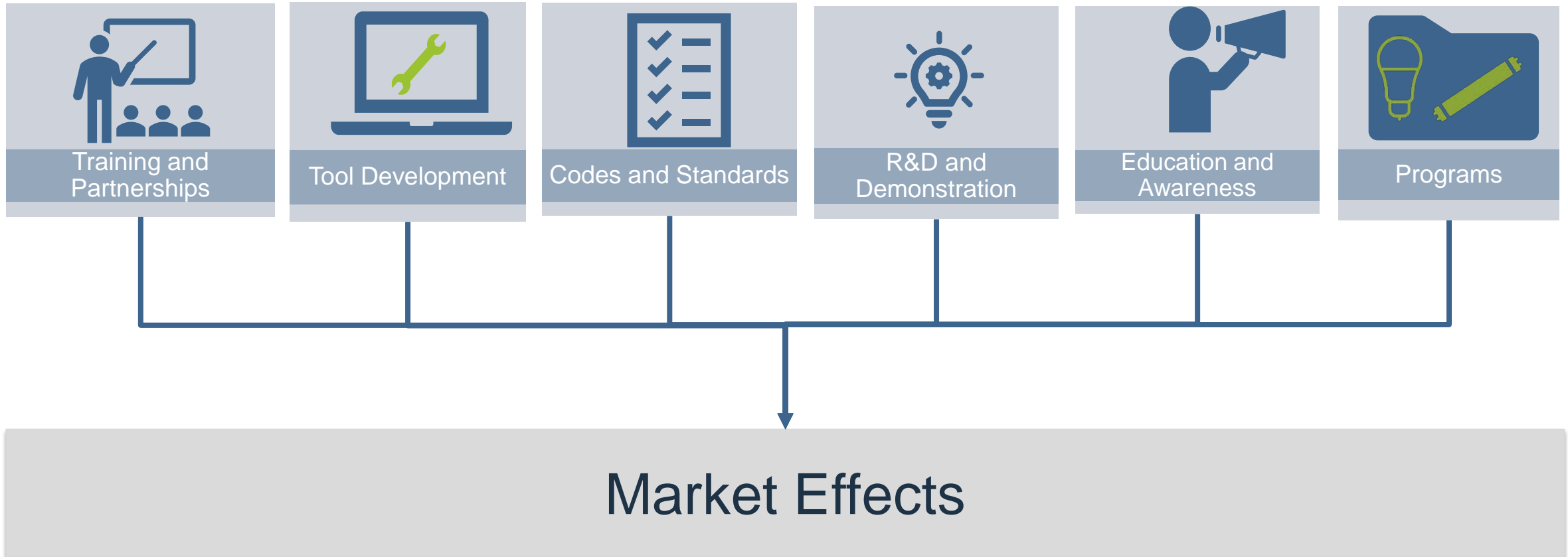
- Align with best practices...as much as possible
  - Need to investigate and demonstrate strategic intent for market transformation
  - Establish counterfactual
- Don't double-count savings from past evaluations
- And...evaluate four products!
  - High performance ballasts, T5-HO and T8 fixtures, LED bulbs and tubes

# EVALUATION APPROACH

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# LOGIC MODEL



# CONTRIBUTION OF HQ ON MARKET

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- Identify which factors (e.g. cost, product availability) impacted the state of the market and their importance
- Estimate how much HQ efforts contributed to each factor
- Estimate the percentage of product sales that could be attributed to HQ efforts (*HQ influence*)

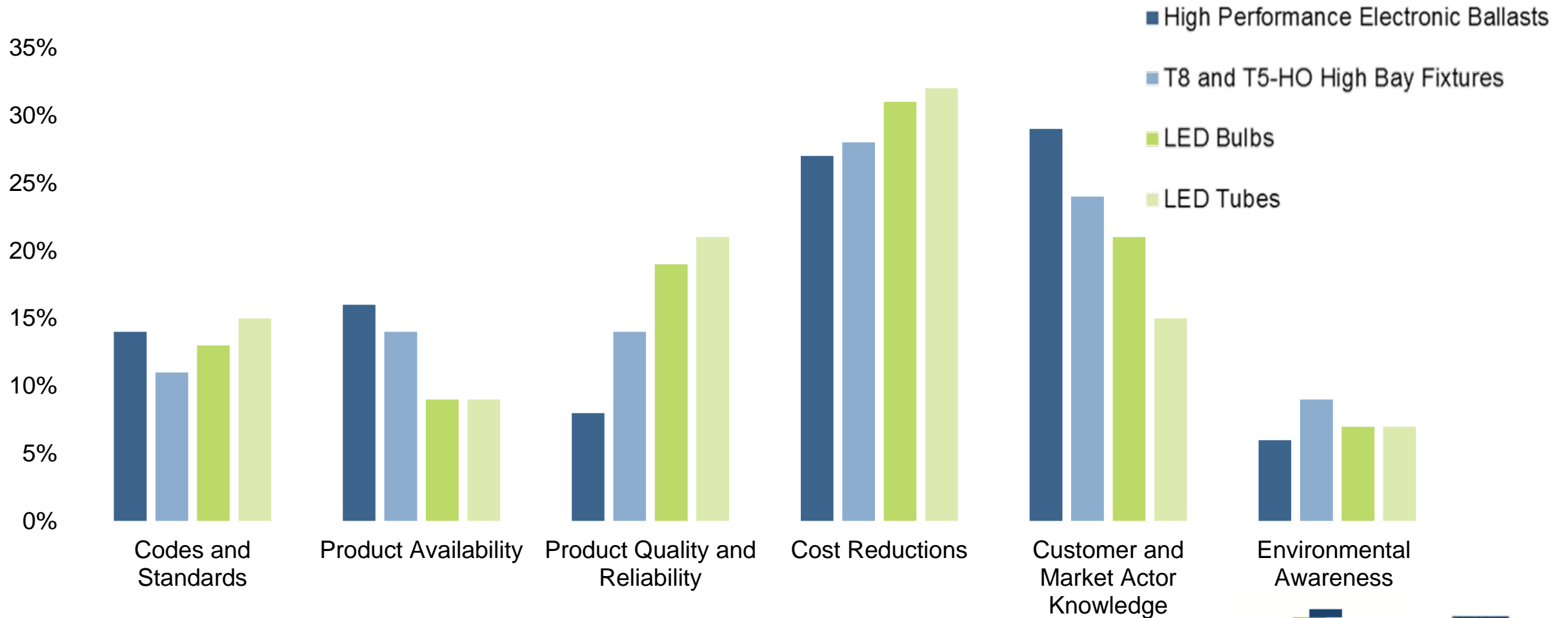
# EVALUATION ACTIVITIES

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- Web Survey with Market Experts
- Delphi Panel

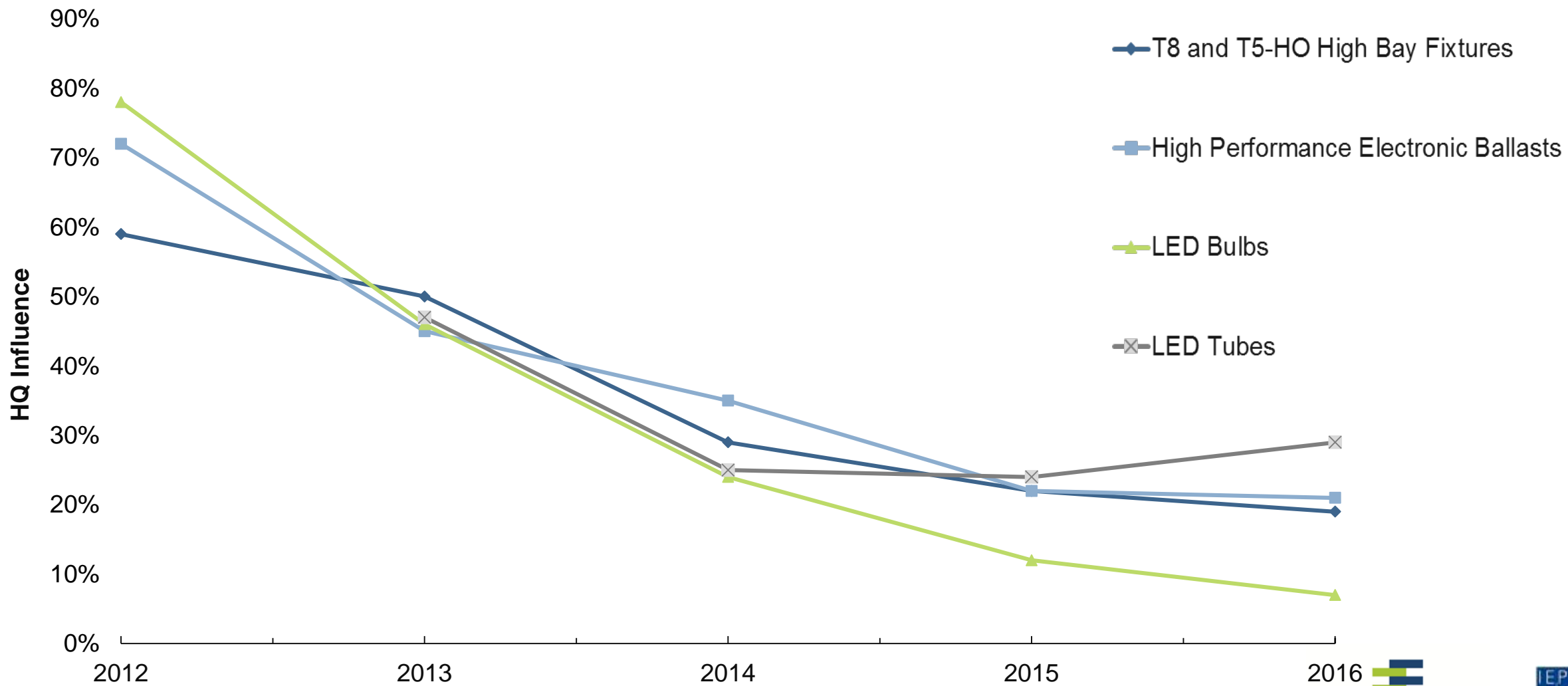


# WHICH FACTORS IMPACTED THE MARKET?

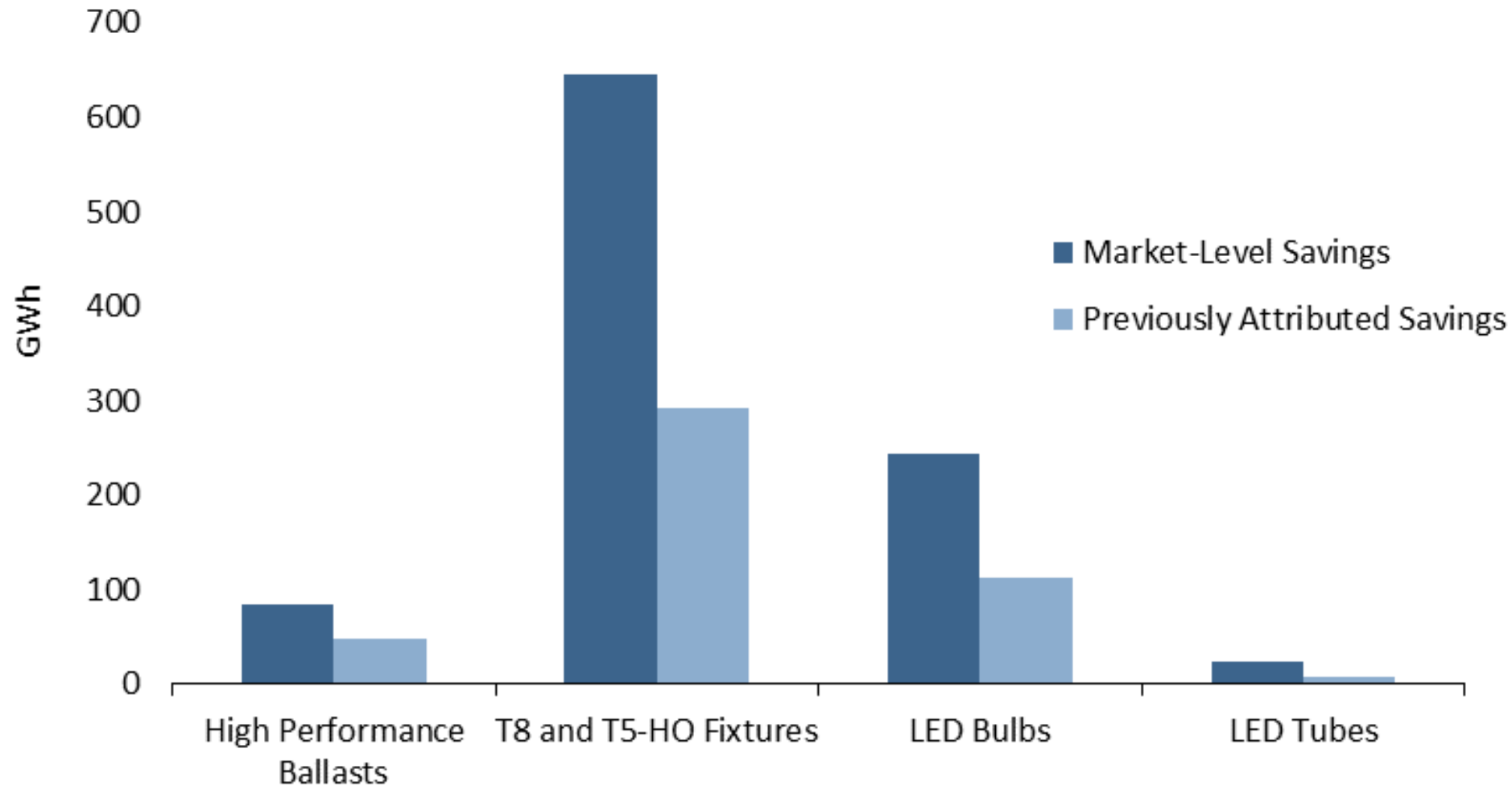




# HQ INFLUENCE



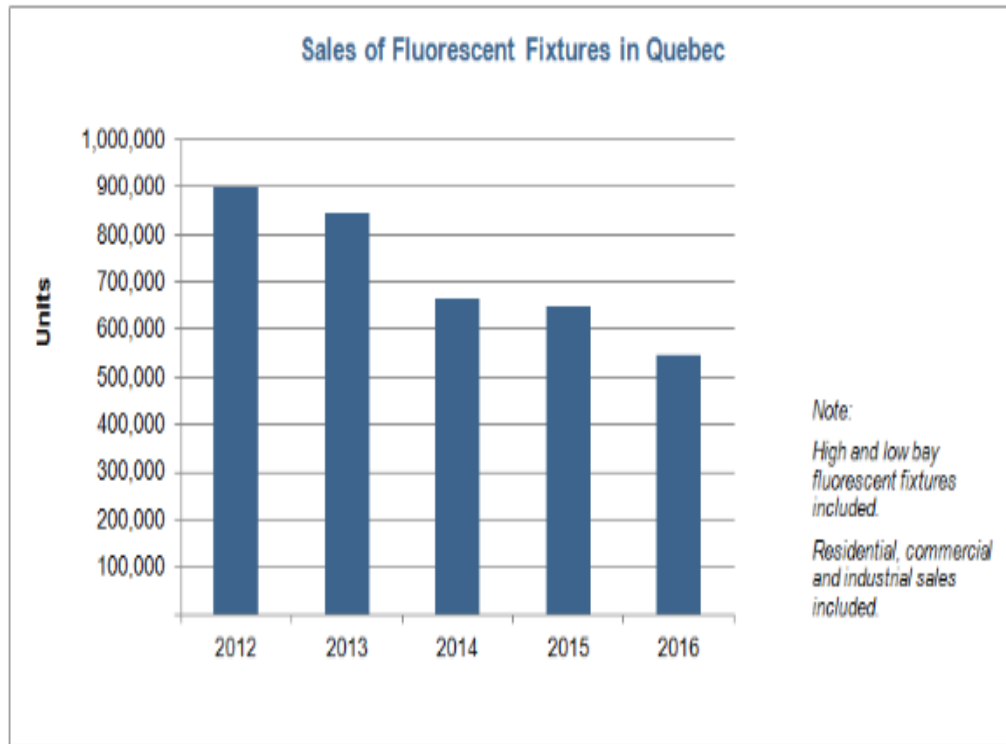
# MARKET-LEVEL SAVINGS



# LESSONS LEARNED

- Advantages of web survey – leverage secondary data

The following graph presents Electrical Equipment Manufacturers Association of Canada (EEMAC) sales data for all types of fluorescent fixtures in the Province of Quebec.



Sales data of fluorescent fixtures presented in this graph were drawn from EEMAC members. What portion of the market does the data from these members cover?

- Only numbers may be entered in this field.
- You must enter a value between 0 and 100.

EEMAC members cover  % of the market

I don't know

In the following table, please provide your best estimate of the portion (%) of total fluorescent fixture sales that were high bay T5-HO fixtures, high bay T8 fixtures, and other fluorescent fixtures for the year 2012 and 2016? Each row needs to total 100%

	Portion of high bay T5-HO (%)	Portion of high bay T8 (%)	Portion of all other fluorescent fixtures (e.g. low bay fixtures, striplights, etc.) (%)	I don't know (%)
2012	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> I don't know (%)
2016	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> I don't know (%)

# LESSONS LEARNED

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- Limit scope to 1-2 products
  - Allow additional questions to further refine estimates
- Analysis to avoid double-counting
  - But not comparing apples to apples (products vs. projects)

# THANK YOU!

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# BACK-UP

# MARKET TRANSFORMATION IMPACT

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- *Sold Units Influenced by HQ = Market Size \* HQ Influence*
- *HQ Market Transformation Savings = (Sold Units Influenced by HQ – Sold Units Already Attributed in Past Evaluations) \* Unitary Savings*