LightFair International 2022 Tradeshow Findings

September 8th, 2022
Agenda

1. Review LightFair goals and methodology
2. Key findings from LightFair
3. Findings Implications
LightFair Goals and Methodology
Goals for Attending LightFair

Most **cost-effective** way to gather large amounts of data from market experts

Provide context to **sales data** findings

Inform **findings and analysis** in all other BPA lighting projects

Provide context for future non-residential lighting **modeling efforts**

Observe **new trends** in the lighting market
Methodology

› Attended 3 days of LightFair

› Interviewed 22 lighting manufacturers and other industry experts

› Information gathered through booth visits and long form interviews

› Coordinated some visits and interviews with NEEA
We spoke with a range of lighting industry experts
Reminders

Findings are based on statements from lighting experts interviewed at LightFair

Any numbers and percentages presented are anecdotal, unless otherwise cited.
Key Findings from LightFair
Key Findings

- Focused on LED fixture sales, though non-LED products remain relevant
- Code and technology improvements increased controls adoption
- COVID-19 caused market actors to adjust sales strategies
- Increased costs caused market actors to reduce supply chain costs
- Market actors rely on utility programs to sell energy-efficient technology
LED and Legacy Product Trends
Manufacturers are focused on LED fixture sales

› LED fixture sales are increasingly recommended over TLEDs for retrofits and new construction

› Fixture sales are higher in coastal areas

According to sales data collection, only 9% of linear product sales are currently LED fixtures
Manufacturers still value legacy product sales

› Key players in the market continue selling legacy products while market demand persists

› “We will be the last one standing in that space”

"Legacy" products are all non-LED products

According to sales data collection, legacy products still make up 32% of sales in the Northwest

Large international manufacturer of lighting and controls products
LED replacement provides opportunity for controls

Reasons for replacement

- Look and feel
- Driver failure
- End of life

Image from Businesswire.com
Controls Trends
Lighting experts predict dramatic controls adoption

“In 10 years 100% of luminaires will be sold with controls”
Lighting-only Manufacturer

“In the next 5-10 years everything will have controls”
Global Lighting and Controls Manufacturer

ESTIMATED PORTION OF LIGHTING PROJECTS WITH CONTROLS

- Low end estimate: 25%
- High end estimate: 40%
- No controls: 60-75%
Manufacturers focused on promoting wireless controls

Wireless controls are favored due to:

- Ease of installation and commissioning
- Reduction of labor and maintenance cost
- Lower materials cost

One common barrier:

- Compatibility issues due to proprietary systems
Within wireless, zonal controls are the most common practice.

**NLC Configuration**
- 1 sensor: many fixtures
- 1 load controller: many fixtures

**Individually Addressable**
- 1 sensor: many fixtures
- 1 load controller: 1 fixture

**LLLC**
- 1 sensor: 1 fixture
- 1 load controller: 1 fixture
Code drives controls baseline and sales trends

› Without significant economic incentive, building code drives adoption

› Building code is pushing controls in warehouse, office, and school applications
Impacts of COVID-19
COVID-19 impacted each company differently

Sales data showed an increase in LED sales from 2020 - 2021

- Quality and sales mix remained steady
- Missed sales due to backlogged orders

Well-adapted to COVID-19

Struggled to adapt to COVID-19
Prices increased for most technologies

Large International Manufacturer

→ Reported a 50% price increase for legacy products due to cost of raw materials
Industrial sales outperformed commercial during early COVID-19

- Safety protocols impacted commercial more than industrial
- Large retail companies increased production

One large international lighting and controls manufacturer saw record sales in 2020 and 2021 in industrial high bay lighting

Drivers of industrial sales
- Amazon
- Tech industry
- Auto industry
COVID-19 provided opportunity to market advanced controls
Supply Chain Changes
2022 saw large increases in shipping costs

Two different types of lighting manufacturers said:

“2022 will be known as a supply chain and freight surcharge year”

“Shipping container prices went from $5,000 to $25,000 during the pandemic”
Some companies are designing products to fit into smaller spaces to reduce shipping costs.
Customers purchase through a variety of distribution channels

- Online and retail retain a portion of the market, but quality varies
- Direct Sales approximate 5%
- Traditional distribution is necessary for large projects
- Online/Retail approximate 20-25%
- ~70-75%
Role of Utility Companies
Companies rely on incentive programs to sell their products

› Price increases renew importance of incentive programs to sell more efficient products
  • Desire to make rebates more user-friendly for contractors

› There is demand for LED and controls incentives

“We would love to see rebate programs give controls incentives [for first generation LED replacements]”

Controls Manufacturer
Findings Implications
Despite COVID-19, lighting market continues to evolve

- Controls are growing in importance for the lighting industry

  Supports BPAs plans to explore future modeling of controls technologies
LED sales continue to be dynamic

› Evidence shows increased LED sales

› LED fixture sales gaining momentum

Continue monitoring fixture sales as a rising portion of replacements projects
Findings Summary

- Lighting controls and system adoptions will surge in coming years
- Supply chain cost increases will continue to disrupt the market
- LED fixtures are now directly competing with TLED lamp replacement sales
Contact

Juan Carlos Blacker
jcblacker@bpa.gov

Kate Donaldson
kdonaldson@cadeogroup.com

Lucas Judson
ljudson@cadeogroup.com