



MOMENTUM SAVINGS QUARTERLY CALL

HAPPY DAY OF THE DEAD





Roll call and Icebreaker

What was your favorite
Halloween costume this
year?

AGENDA

Market Research
Portfolio 2023-2028
Strategic Plan

01

02

Project Updates

Results from the
Annual Lighting Survey
(2022)

03

04

Wrap up and
Questions





01

Market Research Portfolio 2023-2028 Strategic Plan



PRICIPLES



Study What Matters

BPA prioritizes studying markets with high value to BPA and the region. BPA's research aims to have the greatest impact on BPA's and the region's market intelligence about energy efficiency.



Be Consistent in Methods

BPA uses a structured research process and follows a consistent analytical framework.



Use an Open, Accessible Process

BPA openly engages stakeholders and third-party reviewers to help improve accuracy and meet stakeholder needs.



Build Regional Market Intelligence

BPA's Momentum Savings research aspires to do more than quantify savings. It seeks to provide all stakeholders with actionable data and market insights to support planning and programmatic functions.



VISION

We aspire to provide strategic data, market insights, and analysis of Momentum Savings so that BPA can offer bold demand-side programs and policies that lead to an efficient and resilient grid for all residents of the Pacific Northwest

PRIORITIES



Priority 1:

Quantify and report Momentum Savings to contribute to meeting BPA's resource needs.



Priority 2:

Generate market intelligence that helps programs and policy makers maximize impact.



Priority 3:

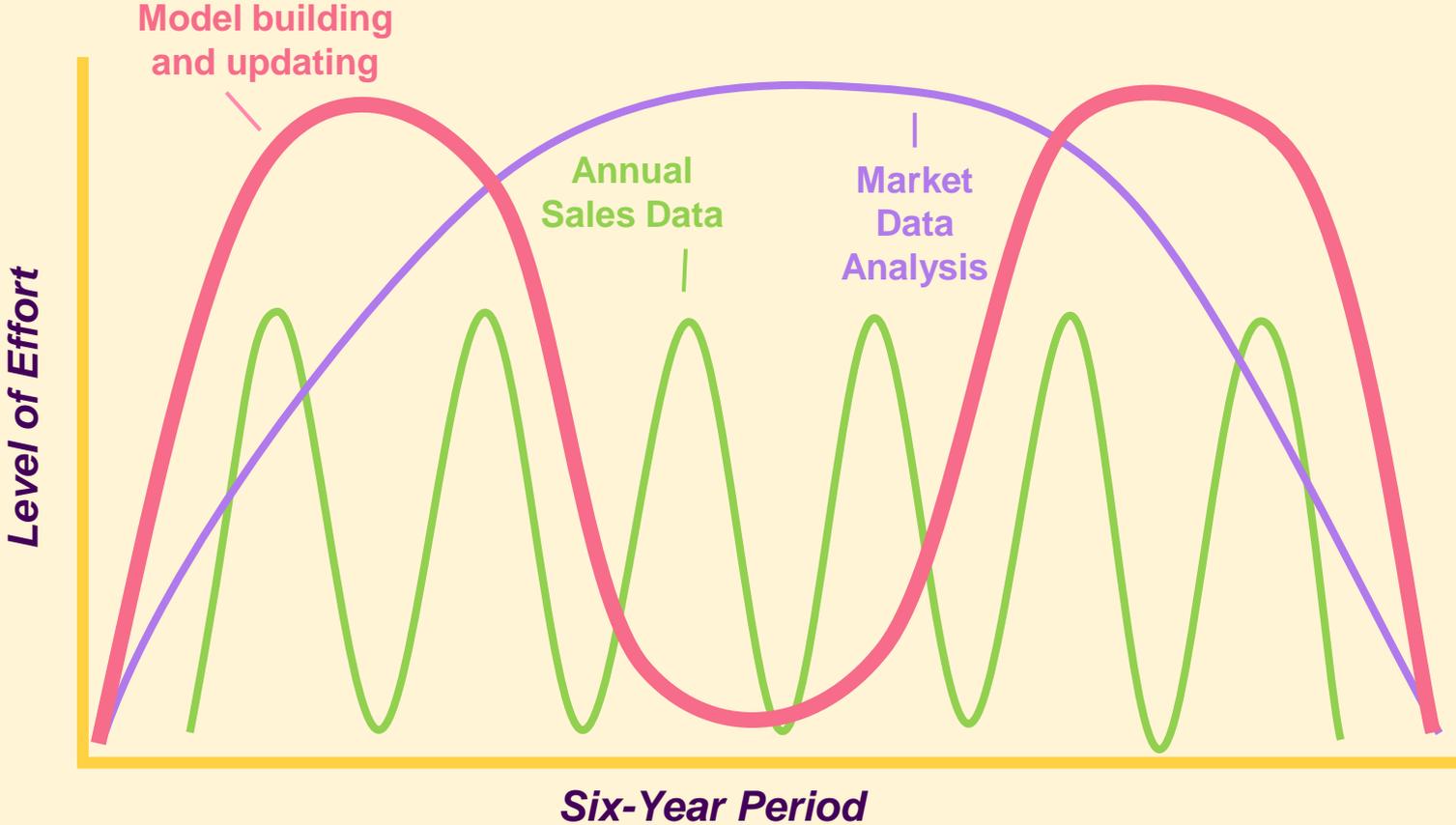
Integrate capacity/demand flexibility metrics into market research to fully communicate the value of demand-side resources.

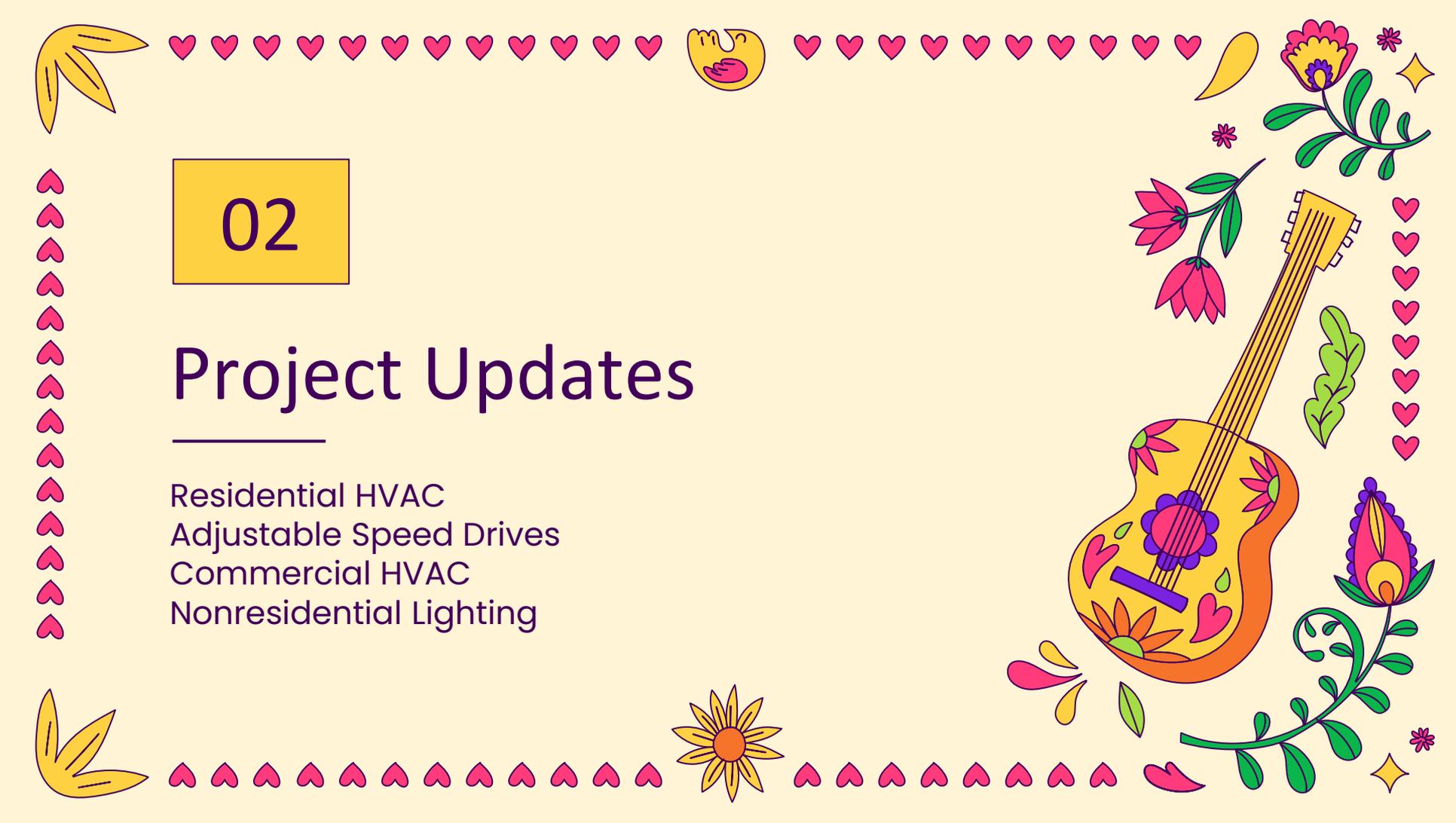


Priority 4:

Study changes in electric load to support power planning.

PORTFOLIO WORKFLOW





02

Project Updates

Residential HVAC
Adjustable Speed Drives
Commercial HVAC
Nonresidential Lighting



Residential HVAC: Market Model Update

Objective:

Update the model for 2022-2027 and produce savings forecast



Activities

- Update analysis period
- Analyze new RBSA Data
- Forecasting



Outcomes

- Analyze residential HVAC and building shell conditions in 2022 using RBSA III draft final data
- Compare 2022 stock insights with past trends
- Gather information to forecast how the residential HVAC stock will change in the next few years



Residential HVAC: 2022 HVAC Sales

Objective:

Analyze efficiency mix of residential HVAC sales collected by NEEA



Activities

- Coordination
- Analyze Data
- Publish Summary by end of year



Outcomes

- Efficiency mix of 2022 sales in air source heat pumps, mini-split heat pumps, gas furnaces, and central air conditioners.
- Additional insights include technology mix in 2022 HVAC sales, discussion of ducted mini-split heat pumps, and variable speed heat pump growth



Adjustable Speed Drives: Market Model Update

Objective:

Update the model for 2022-2027 and produce savings forecast



Activities

- Update analysis scope
- Analyze data
- Forecasting



Outcomes

- Add commercial pumps and fans to model scope
- Enhance pump/fan load profile and operating hour inputs using custom project metered data



Adjustable Speed Drives: Shipments Data Pilot

Objective:

Determine feasibility of collecting annual shipments data from drive suppliers in the Northwest



Activities

- Market Actor Outreach
- Determine Feasibility
- Collect Data

Outcomes

- Summary of data collected and lessons learned from the pilot
- Characterization of market actors by size, sector, market niche
- Clearly defined scope for full-scale data collection effort



Commercial HVAC: Market Model Build

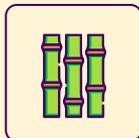


Objective:
Build market model for the commercial HVAC market



Activities

- Develop inputs and structure
 - Collect and analyze data
 - Program savings
 - Engage market actors
- 



Outcomes

- Completed a market model structure and wrote code that successfully tested its validity
 - Reviewed permit data and inputted the results into the structure and segmentation
 - Analyzed and inputted past CBSA data and participating in new study
 - Completed segmentation study for buildings
- 



Commercial HVAC: Building Simulations

Objective:

Determine inputs and sources needed to accurately simulate commercial building stock



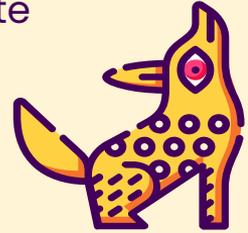
Activities

- Finalize QA/QC process & data sources
- Map permit data and code requirements
- Establish performance curves
- Run initial simulation



Outcomes

- Still to be determined





Nonresidential Lighting

Objective:

Update the model for 2022-2027 and produce savings forecast



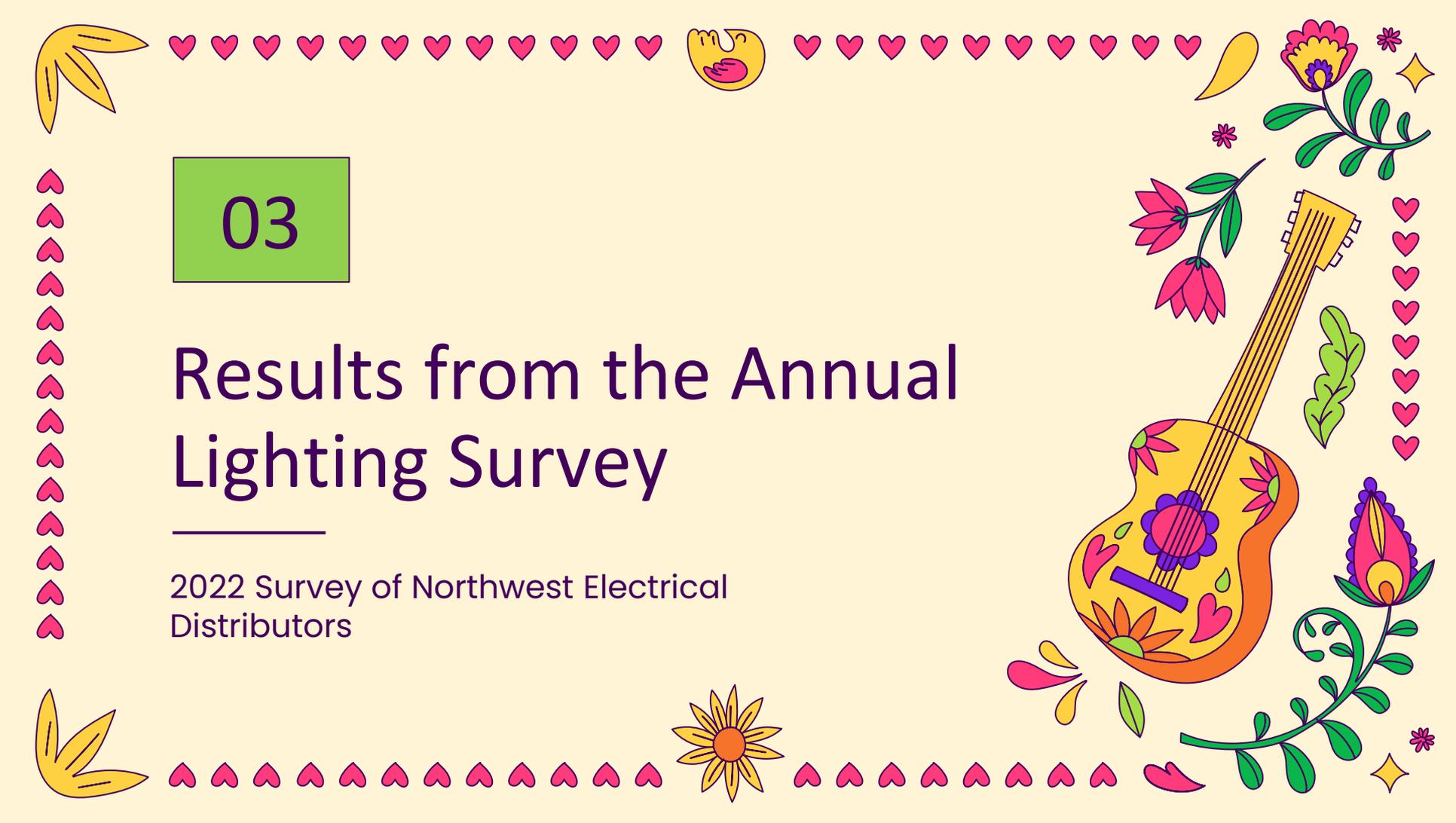
Activities

- Collect and analyze market data
- Develop new model platform
- Determine building and installed stock inputs

Outcomes

- Completed transition of model platform to Python
- Updated methodology for sales forecasting
- Completed building stock analysis, including a revised methodology, review of data sources, and comparison of previous models
- Attended the 2023 LightFair and collected annual sales data of which is discussed in the next





03

Results from the Annual Lighting Survey

2022 Survey of Northwest Electrical
Distributors



A colorful illustration of an acoustic guitar with a yellow body and orange neck, decorated with pink and purple floral patterns. The guitar is surrounded by various floral elements, including pink and purple flowers, green leaves, and yellow petals. The background is white with a decorative border of pink hearts and floral motifs.

SURVEY OVERVIEW



48

Total Distributors



24

2022 Participants



+1

2022 New Participants



~40%

Market Share
Representation



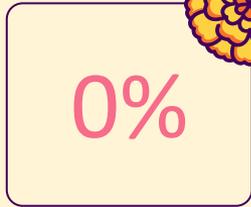
2018-2022

Years Covered

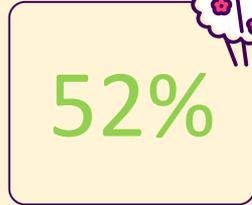
SURVEY HIGHLIGHTS



67% of all unit sales in 2022 were LEDs



There was a 0% change in total unit sales between 2021 and 2022, marking a potential stabilization in sales volumes following COVID-19.

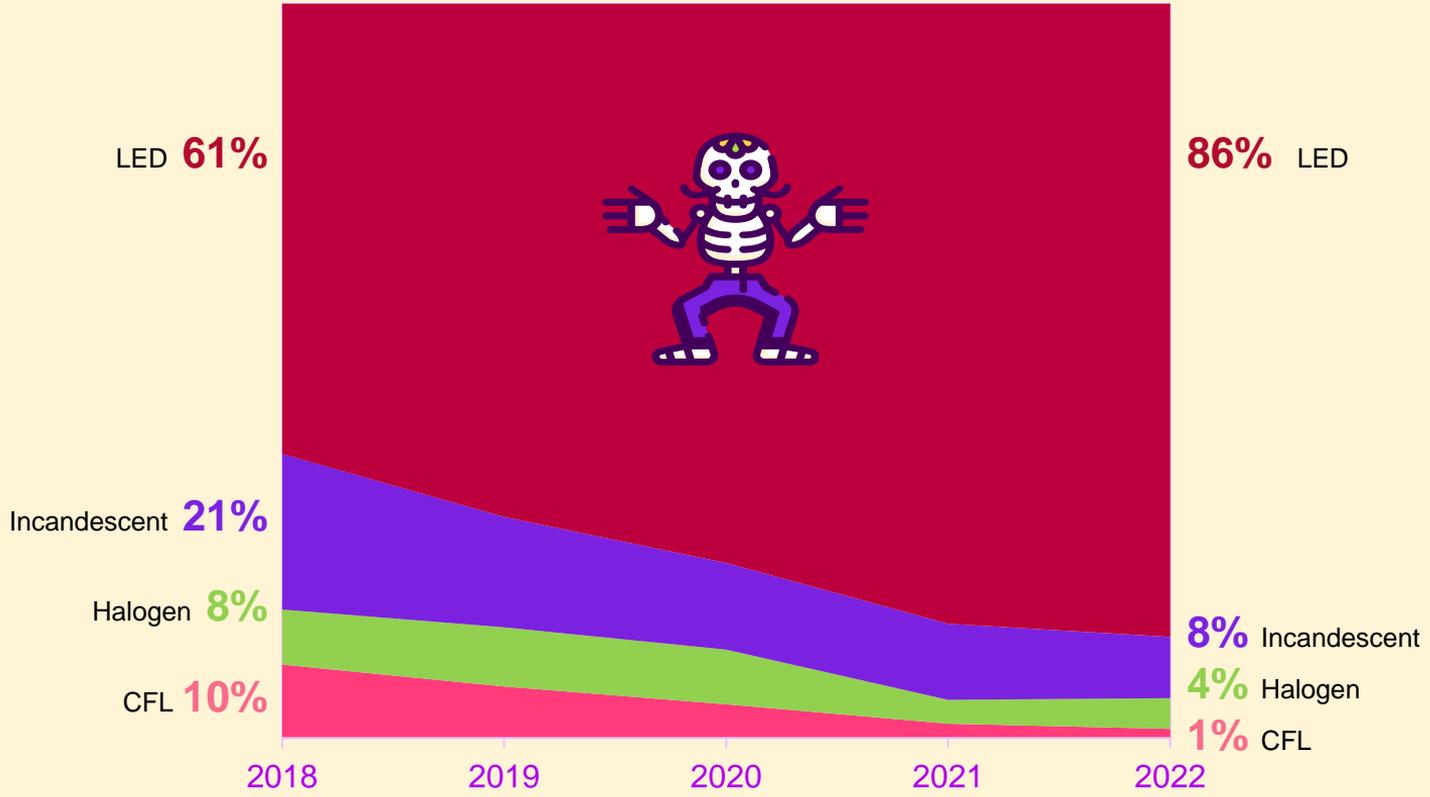


52% of 4ft T8 sales were TLEDs, representing a continued shift away from the once dominant linear fluorescent lamp.

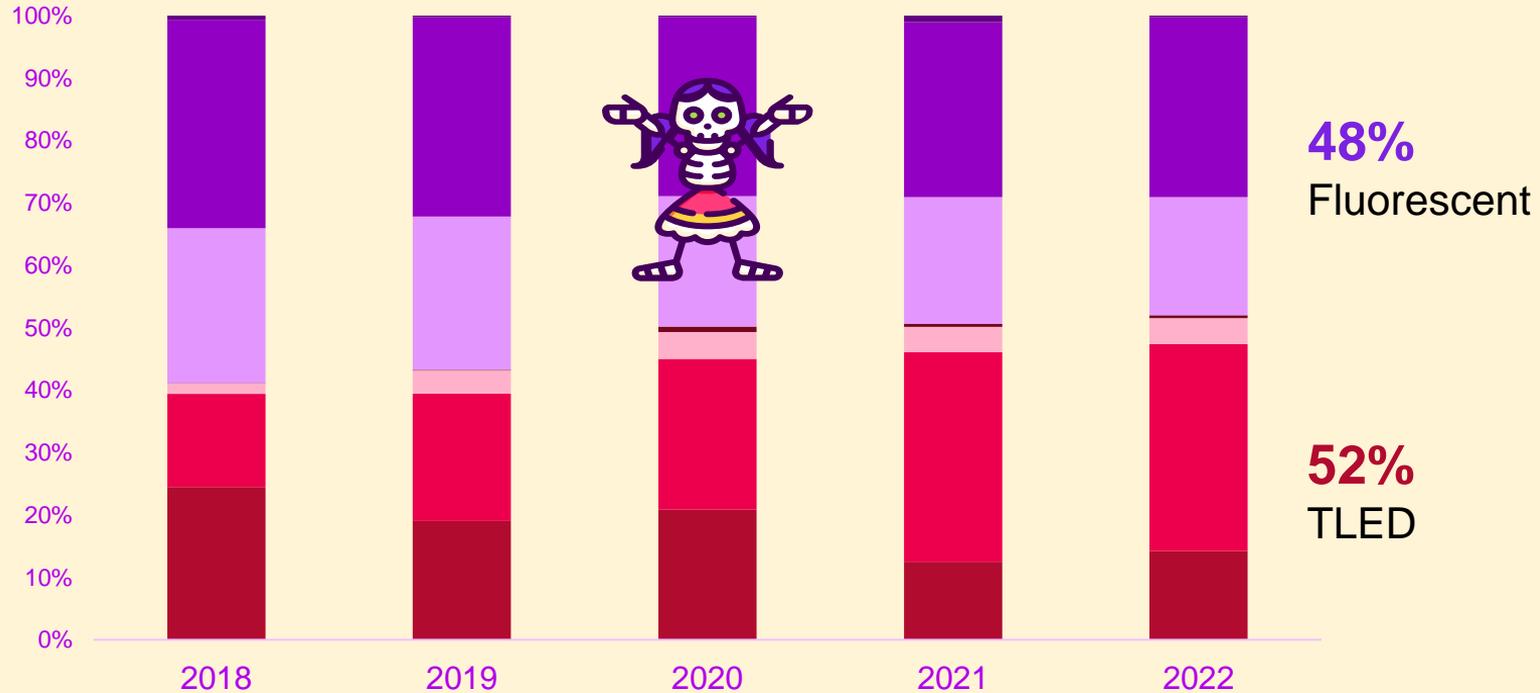
Percent of Unit Sales by Technology Type



Screw in Lamp Sales by Type



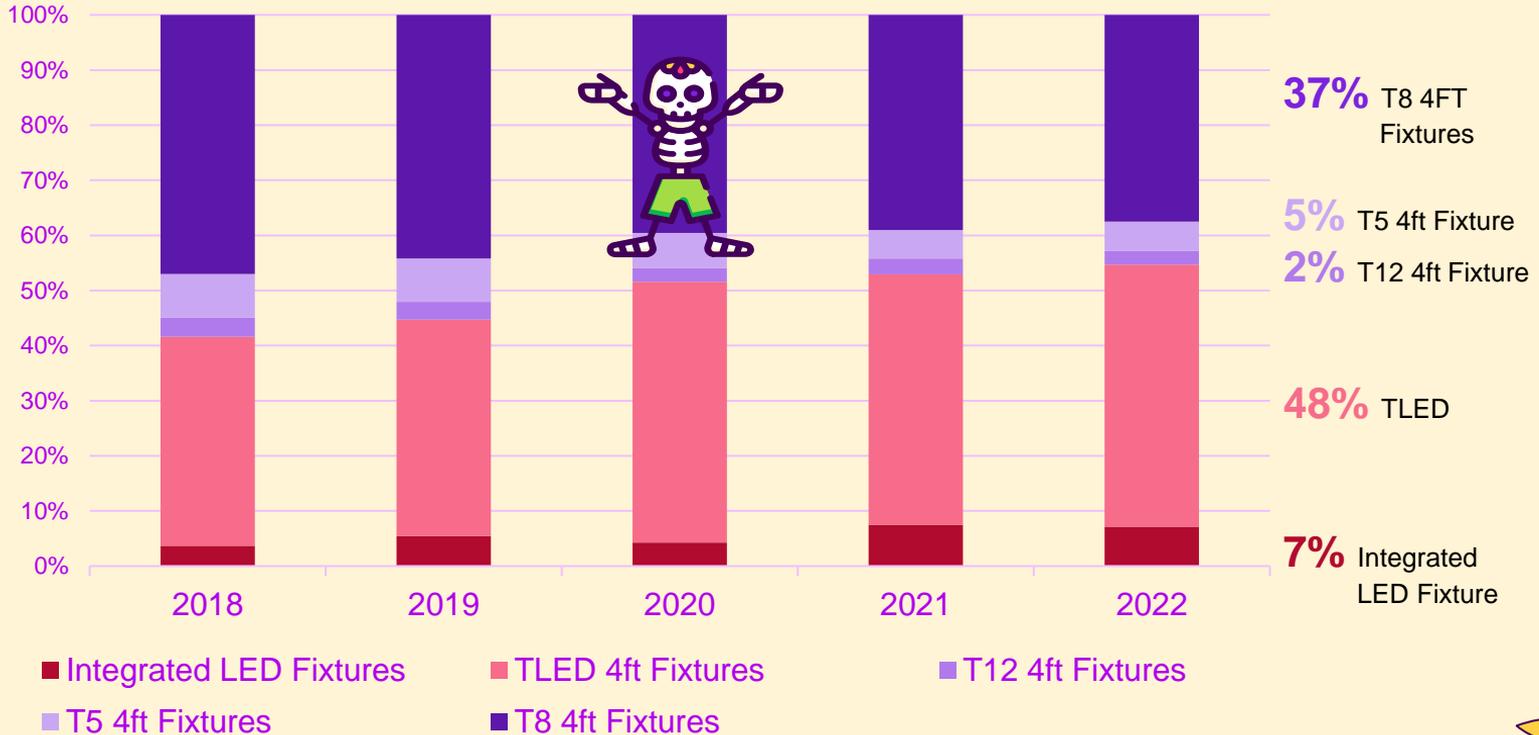
Percent Linear Lamp Sales by Type

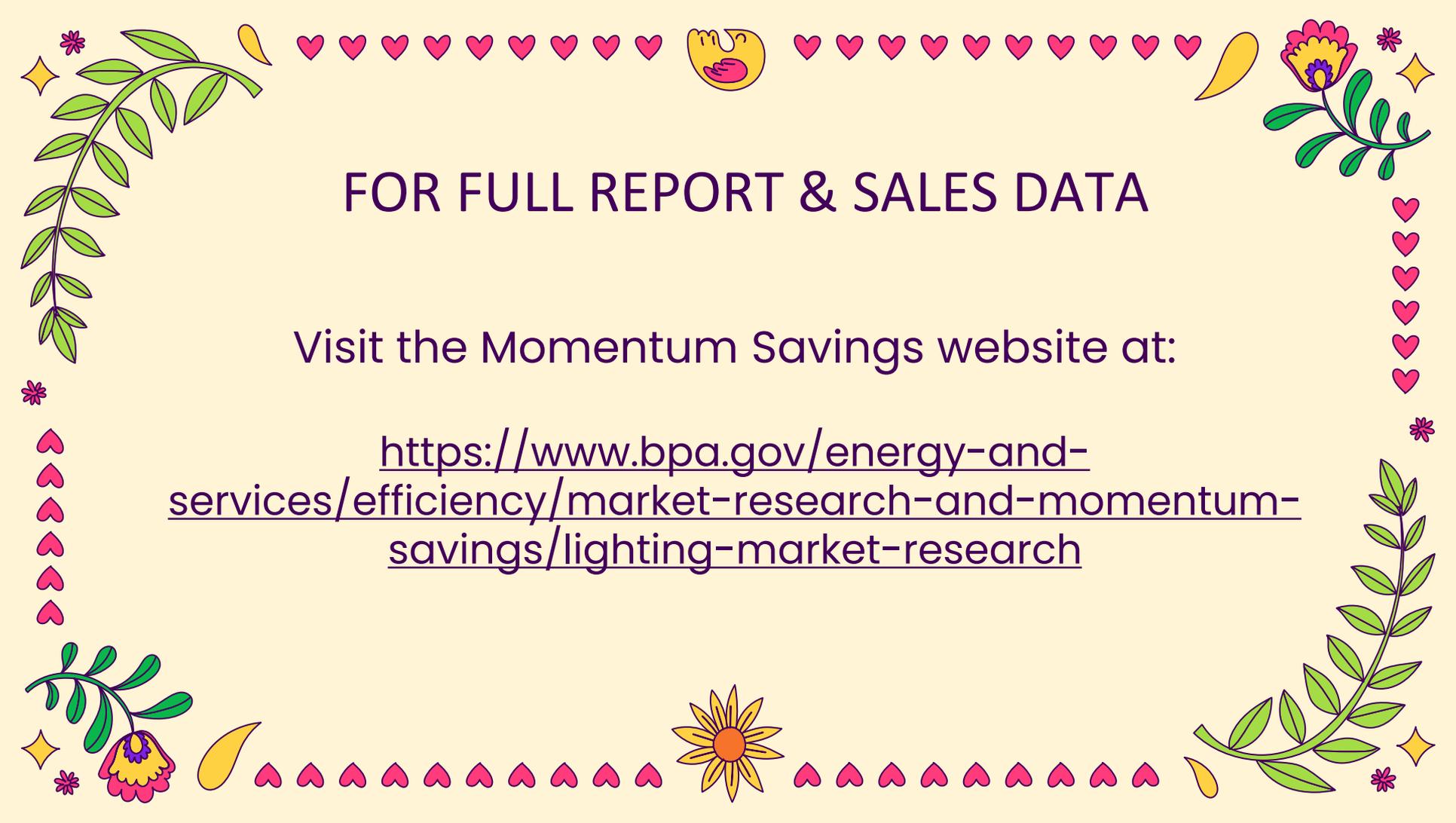


- LFL 4ft T8 Series 700 32W
- LFL 4ft T8 Series 800 RW
- TLED UL Type A+B - Dual-Mode/Hybrid
- TLED UL Type A - Plug-and-Play/Direct Replacement

- LFL 4ft T8 Series 800 32W
- TLED UL Type B - Ballast Bypass
- TLED UL Type C - Remote Driver

Percent of Ambient Linear Lamp and Fixture Sales by Type





FOR FULL REPORT & SALES DATA

Visit the Momentum Savings website at:

<https://www.bpa.gov/energy-and-services/efficiency/market-research-and-momentum-savings/lighting-market-research>

QUESTIONS??

THE MOMENTUM SAVINGS TEAM



Bonnie Watson

bfwatson@bpa.gov

Team Lead



Joan Wang

jjwang@bpa.gov

Residential HVAC
Adjustable Speed Drives



Juan Carlos Blacker

jcblacker@bpa.gov

Commercial HVAC
Nonresidential Lighting



THANK YOU!



CREDITS: This presentation template was created by [Slidesgo](#), and includes icons by [Flaticon](#), and infographics & images by [Freepik](#)

Please keep this slide for attribution