

April 25, 2017

Commercial Advisory Committee



Agenda


- Introductions, Informational Updates, Announcements
- Commercial Portfolio Update
- Commercial Building Stock Assessment
- CAC Member Share Out/Round Robin
- Lunch!
- **Commercial Code Enhancement – milestone review**
- Reduced Wattage Lamp Replacement
- Emerging Technology

Informational Updates

- See Packet Page 3 for links to the
 - Latest CAC and RPAC meeting notes
 - Q1 C&I Lighting Progress Newsletter
 - Q2 Emerging Technology Report

Efficiency Exchange 2017:

- May 9-10 at Oregon Convention Center (Portland)
- Hotel block at Doubletree (by BPA)




Efficiency Exchange

Efficiency Exchange will be held May 9-10 at the Oregon Convention Center in Portland. EFX17 is the premier networking and learning event for energy efficiency professionals across the Northwest.

- Home
- Registration
- 2017 Program
- Hotel and Event Venue
- Activities
- Previous Conferences

Home



**May 9-10, 2017
Portland, OR**

**Connect with
your peers.**

**Learn and share
innovations.**

**Take new ideas
home with you.**

[Register Now >](#)

Efficiency Exchange 2017 will be held at the Oregon Convention Center in Portland, Oregon on May 9-10. Efficiency Exchange is the premier networking and learning conference for energy efficiency professionals from across the Northwest. Attendees from public and private electric utilities, consulting and research firms, government and non-profit organizations will come together to learn and connect to help the region more effectively achieve its energy savings goals.

This year's conference theme is **Energy Efficiency in a Changing Environment**.

***Who's
attending?***

Commercial Portfolio

Q1 2017 Update

Reduced Wattage
Lamp
Replacement



Luminaire Level
Lighting Controls



Top-Tier
Trade Ally



Commercial
Lighting Regional
Resources



Building
Operator
Certification



Commercial
Real Estate



Commercial
Window
Attachments



Commercial Code
Enhancement



Strategic Energy
Management



CIA org chart slide



Market Strategy & Execution

Julia Harper
Director
503-688-5434



**Commercial /
Industrial / Ag**
Sepideh Rezania
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Program Coordinator

Anne Swanson
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Program Coordinator

Carla Compisi
503-688-5416



Sr. Program Manager

Christian Miner
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- Commercial Real Estate
- Window Attachments



Sr. Program Manager

Kim Hughes
503-688-5467

- Building Operator Certification Expansion
- Commercial New Construction
- Building Renewal tool pilot



Sr. Program Manager

Elaine Miller
503-688-5461

- Reduced Wattage Lamp Replacement
- Upstream Lighting Platform



Program Manager

Maria Murphy
503-688-5486

- New Commercial Programs



Sr. Program Manager

Anne Curran
503-688-5431

- Luminaire-Level Lighting Controls
- Top-Tier Trade Ally
- Lighting Resources



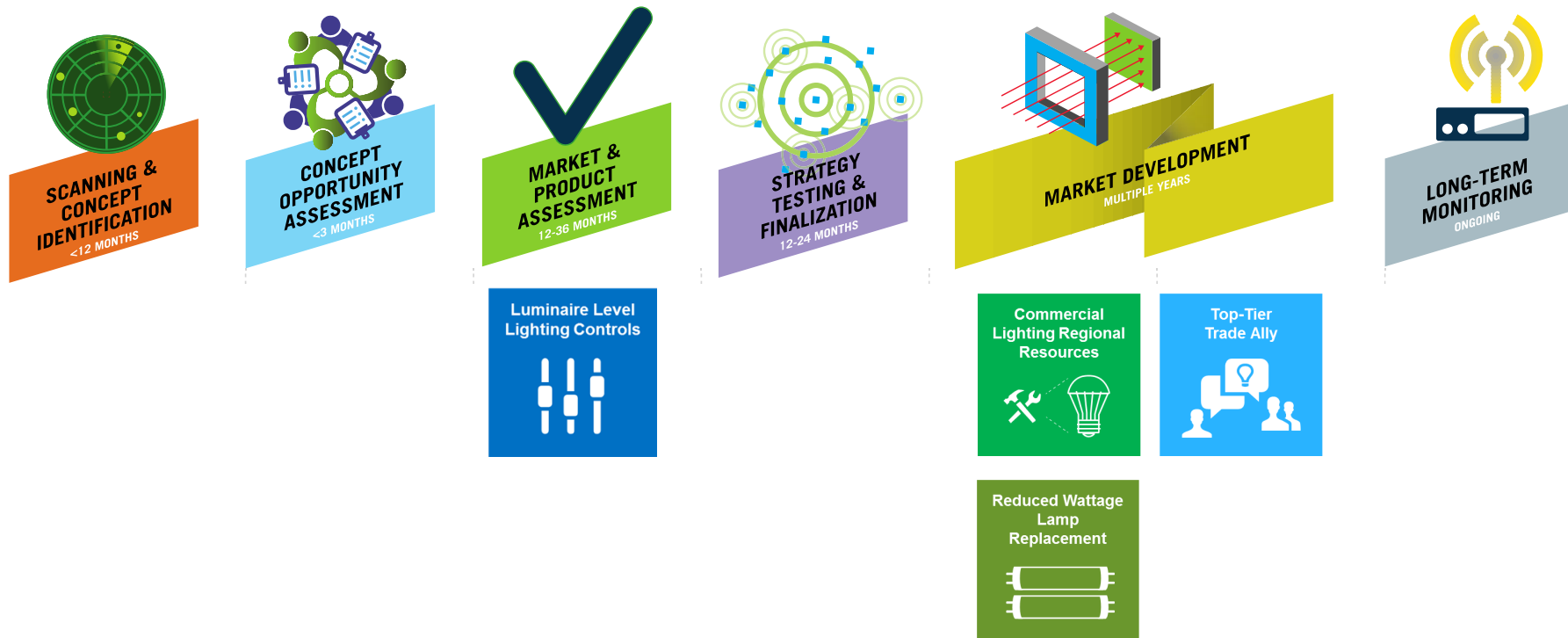
Program Manager

Warren Fish
503-688-5402

- SEM Infrastructure
- Certified Refrigeration Energy Specialist Certification
- Industrial Technical Training

Commercial Lighting Market

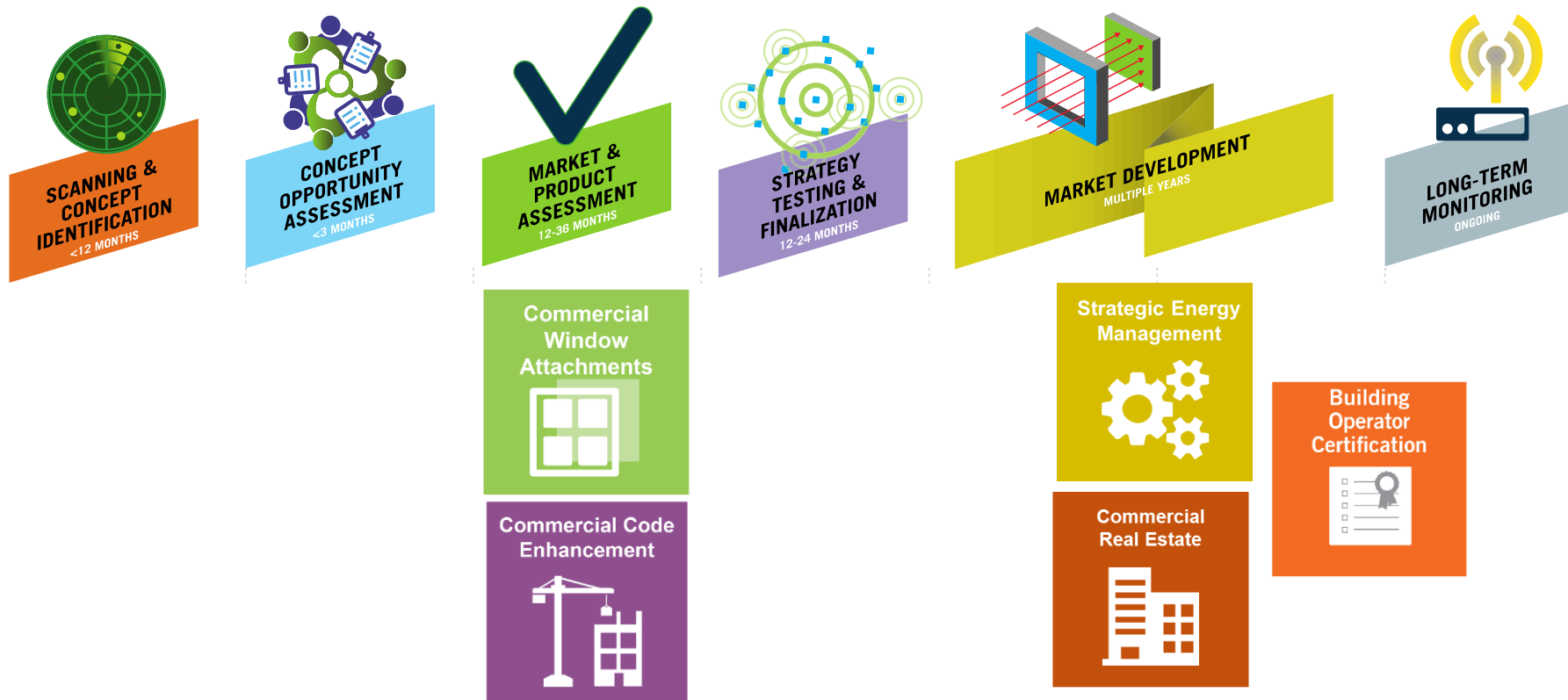
LIFECYCLE PHASES




Program	Q1 Update
<div data-bbox="44 279 198 344"> <p>Reduced Wattage Lamp Replacement</p> </div> <div data-bbox="59 362 189 425">  </div>	<div data-bbox="237 279 633 372"> <p>Reduced Wattage Lamp Replacement</p> </div> <div data-bbox="716 279 1808 425"> <ul style="list-style-type: none"> • 27% market penetration. • Touching 40% of overall lamp sales via 12 distributors. • Strong success stories on CED. </div>
<div data-bbox="79 486 162 525"> <p>Top-Tier Trade Ally</p> </div> <div data-bbox="50 544 191 634">  </div>	<div data-bbox="237 486 620 579"> <p>Top Tier Trade Ally Advanced Training</p> </div> <div data-bbox="716 486 1789 625"> <ul style="list-style-type: none"> • Grown to 69 individuals and 29 companies with designation. • Positive feedback from Trade Allies at the ETO event. </div>
<div data-bbox="44 711 198 749"> <p>Luminaire Level Lighting Controls</p> </div> <div data-bbox="83 768 162 858">  </div>	<div data-bbox="237 711 595 803"> <p>Luminaire Level Lighting Controls</p> </div> <div data-bbox="716 711 1856 896"> <ul style="list-style-type: none"> • DLC's Advanced Lighting Training piloted in collaboration with Idaho Power received positive feedback. • PSE updated calculator with higher tier incentives for LLLC </div>
<div data-bbox="40 933 195 993"> <p>Commercial Lighting Regional Resources</p> </div> <div data-bbox="54 1012 177 1079">  </div>	<div data-bbox="237 968 664 1061"> <p>Commercial Lighting Infrastructure</p> </div> <div data-bbox="716 933 1309 972"> <ul style="list-style-type: none"> • www.nwlightingnetwork.com </div>

Commercial Building & New Construction Markets

LIFECYCLE PHASES



Program	Q1 Update
<div data-bbox="36 132 241 337"> <div data-bbox="79 154 195 197">Commercial Real Estate</div>  </div> <div data-bbox="241 132 770 451"> Commercial Real Estate </div>	<ul style="list-style-type: none"> • Great user feedback session on Navigator. • Navigator and BetterBricks re-design wireframes in the works. • Webinar on Spark. Unico and Clise Properties interested and using the tool. • January BetterBricks newsletter.
<div data-bbox="36 451 241 664"> <div data-bbox="69 469 208 544">Commercial Window Attachments</div>  </div> <div data-bbox="241 451 770 726"> Window Attachments </div>	<ul style="list-style-type: none"> • Baseline completed. • RTF approved protocol in plans to be reviewed this Summer. • AERC to introduce a residential windows rating in June.
<div data-bbox="36 726 241 935"> <div data-bbox="54 743 229 792">Strategic Energy Management</div>  </div> <div data-bbox="241 726 770 953"> Commercial and Industrial SEM Infrastructure </div>	<ul style="list-style-type: none"> • Leveraged DOE dollars to upgrade and integrate Online SEM • Collaboration in works! • www.semhub.com
<div data-bbox="36 953 241 1163"> <div data-bbox="48 975 233 1021">Commercial Code Enhancement</div>  </div> <div data-bbox="241 953 770 1148"> Commercial Code Enhancement </div>	<ul style="list-style-type: none"> • Design completed with 14 utility funders and 8 code stakeholders. • Scale-up Approval in May 2017.
<div data-bbox="36 1148 241 1385"> <div data-bbox="79 1200 202 1272">Building Operator Certification</div>  </div> <div data-bbox="241 1148 770 1385"> Building Operator Certification Expansion </div>	<ul style="list-style-type: none"> • On path for Self-sufficiency: IBOA set 2017 goals to recruit additional board members and develop an additional set of services to attract new IBOA members in its three-state territory.

The background of the slide features a large, stylized diamond shape composed of several overlapping, semi-transparent layers of orange and yellow. The layers create a sense of depth and movement, with the colors transitioning from a darker orange at the edges to a lighter yellow in the center. The text 'CBSA' is centered within this diamond shape.

CBSA

CAC Member Share-out

Lunch!

April 25, 2017

Commercial Code Enhancement (CCE)

Kim Hughes
Senior Program Manager



Today's Conversation

- Initiative Design
- Initiative Description
- Roles and Responsibilities
- RPAC Vote

We are here



Initiative Design



Department of Commerce



“People and organizations in the region come from very different places and have differing experiences and points of view. It has been good to go through a process of acknowledgment and alignment.”

“Valuable to identify the tension points and understand other perspectives - helps accept other views into the strategy and plan NEEA may develop for the region.”

Initiative Description

Initiative Description

The CCE program applies market transformation principles to the code change process to create better alignment between the market, utility programs, and code.

What are the market barriers?



**Fragmented
regional
voluntary
programs**



**No Business
Case for Developers
and Builders**



**Lack of
proof for
proposed tech**



**Resistance
to Change**

What are the interventions?



State-specific
coordination plans



Technology and Practice
Assessments

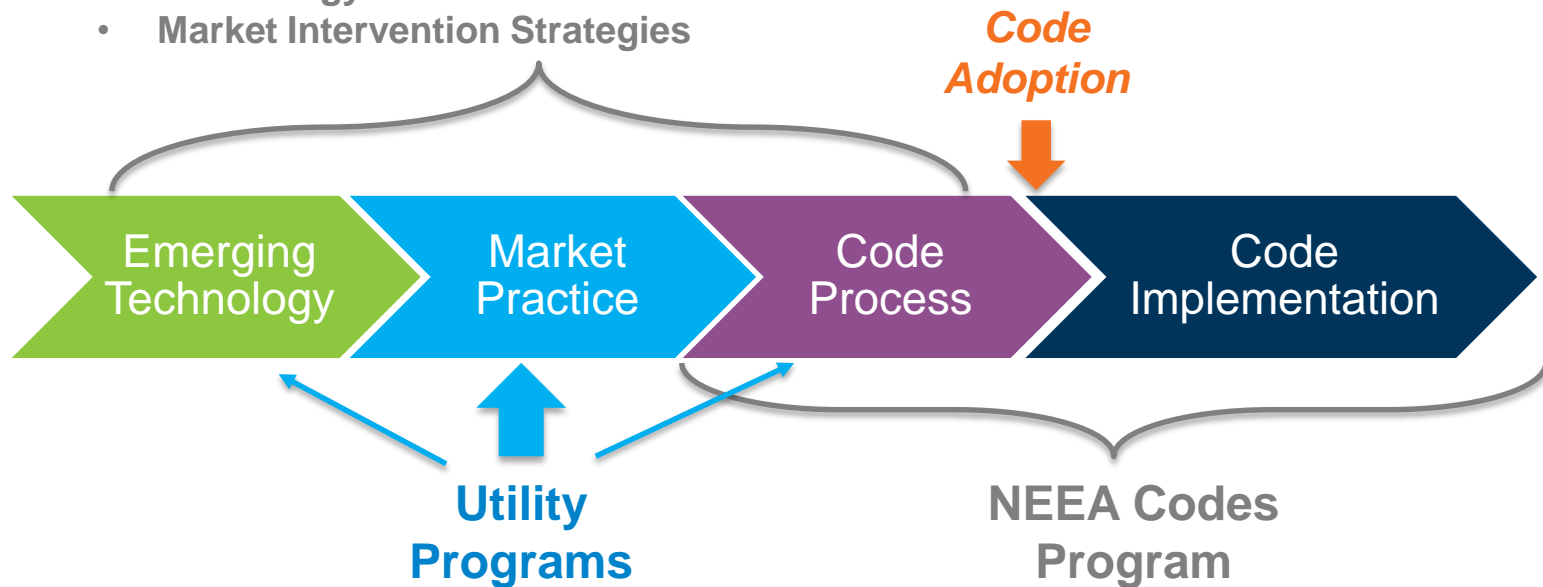


Market Intervention
Strategies

Desired Future State

Commercial Code Enhancement

- State Coordination Plans
- Technology and Practice Assessments
- Market Intervention Strategies



Initiative Outcome – Effective Commercial Building Energy Codes

- **Greater simplicity** of codes
- **Market practice leads** and informs code
- **Strategic partnerships** between utilities, jurisdictions and the design and construction industry
- **Lower energy use**

Value to NEEA funders

- Greater ability to proactively design programs with future code changes in mind
- Increased ability to capture energy savings and influence code
- Potential for greater compliance with a better prepared market

Roles & Responsibilities

Proposed Funder Role



Time – State Coordination
Plan; Lessons learned

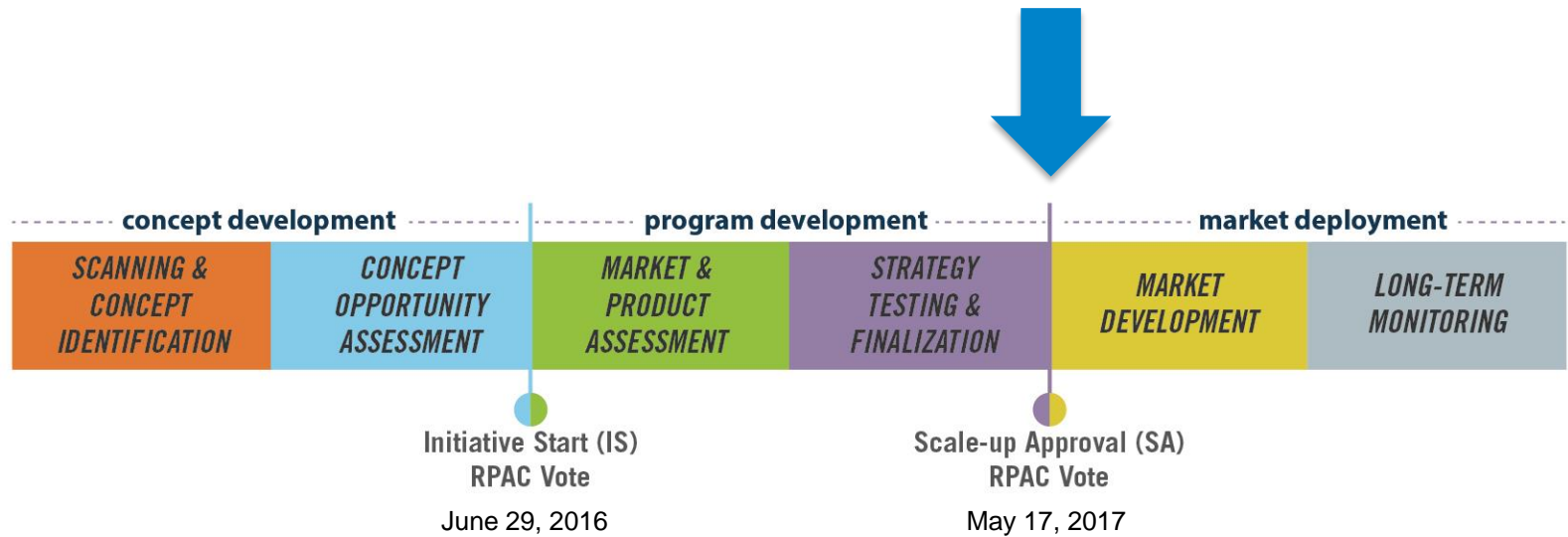


Information – Technology
Assessment process



Coordination – Market
Activities

Next Steps





Thank you!

TOGETHER We Are Transforming the Northwest



Break!

RWLR – CAC Update

April 25, 2017

Elaine Miller
Senior Program Manager
Northwest Energy Efficiency Alliance



To Cover Today

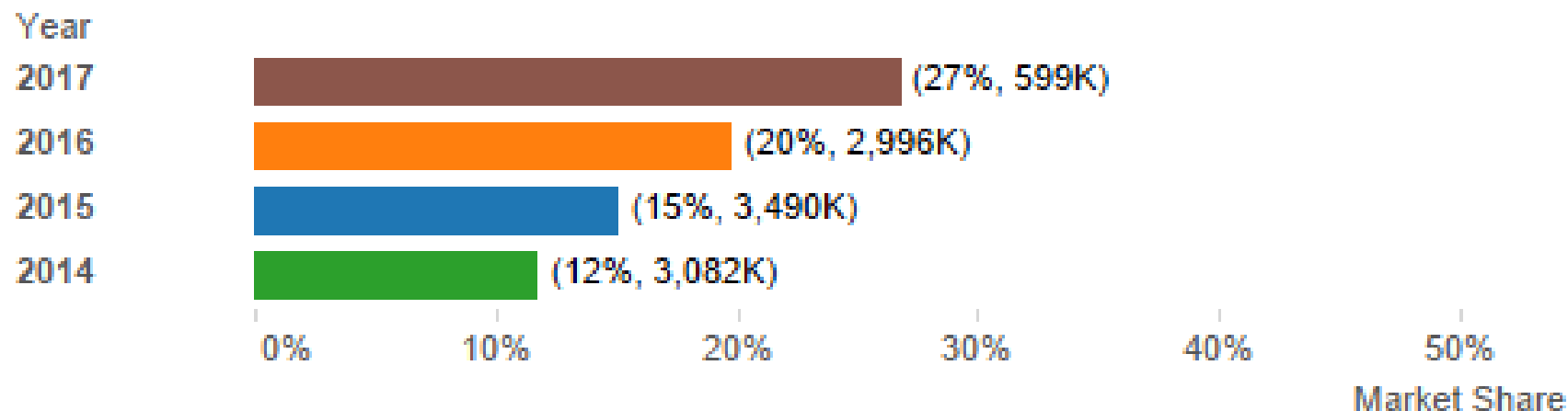
- Update on progress to date
- Engagement
- Challenges
- Overall trends
- Next steps
- Discussion



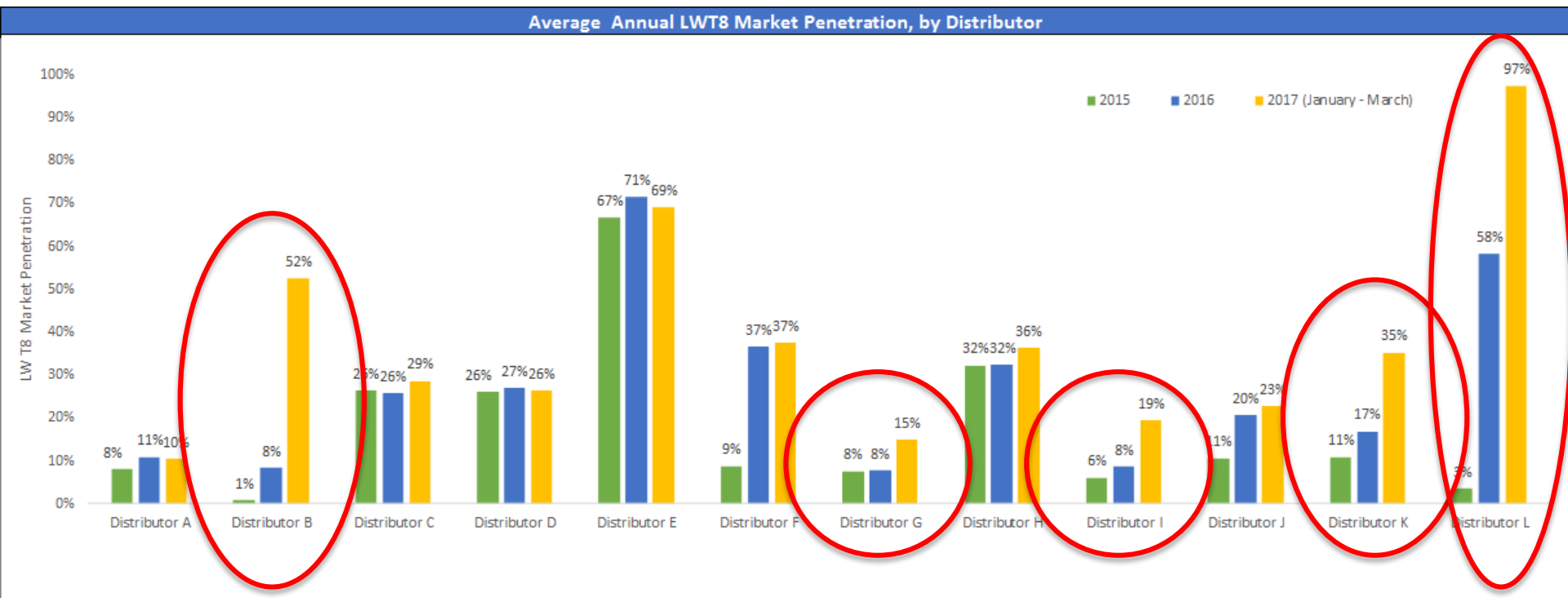
Big Guys Improving Drives Jump

Reduced Wattage Market Share

Values in parentheses represent: (Market Share, Sales of 25/28/32 Watt bulbs in *thousands*)

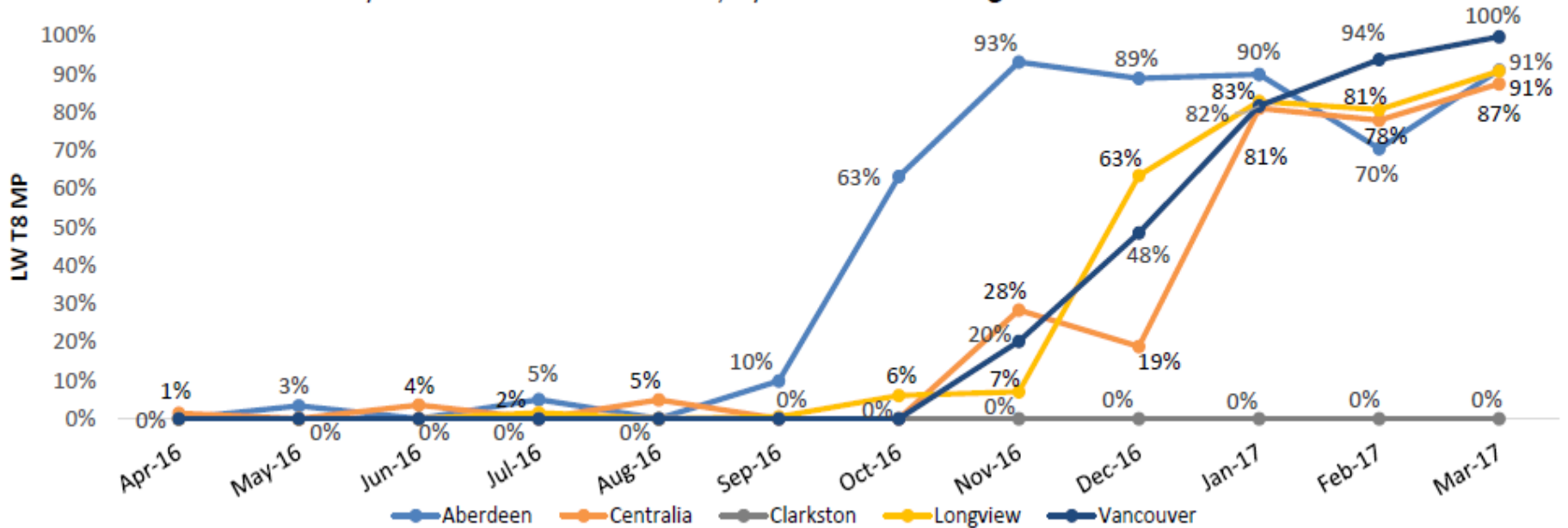


Some Good Movement in Q1 '17



Details on Distributor B

Monthly LW T8 Market Penetration, By Profit Center - High Volume Profit Centers



Results of large branches after restock

Keys to Successful Behavior Change

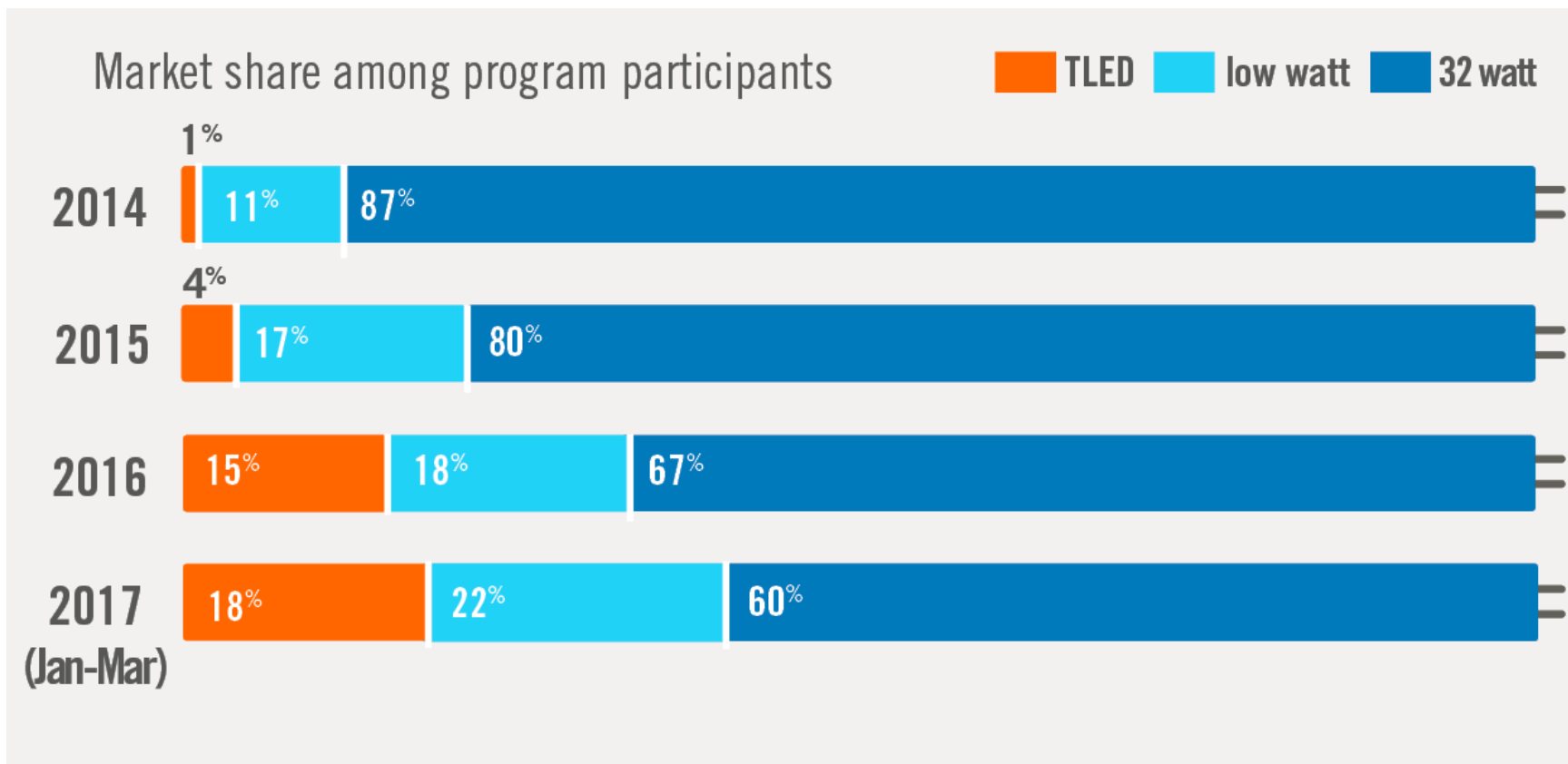
- Special pricing in place
- Staff rewards
- Corporate – branch level communication to promote shift
- **Must change stock to see dramatic shift**
- Leverage FOMO



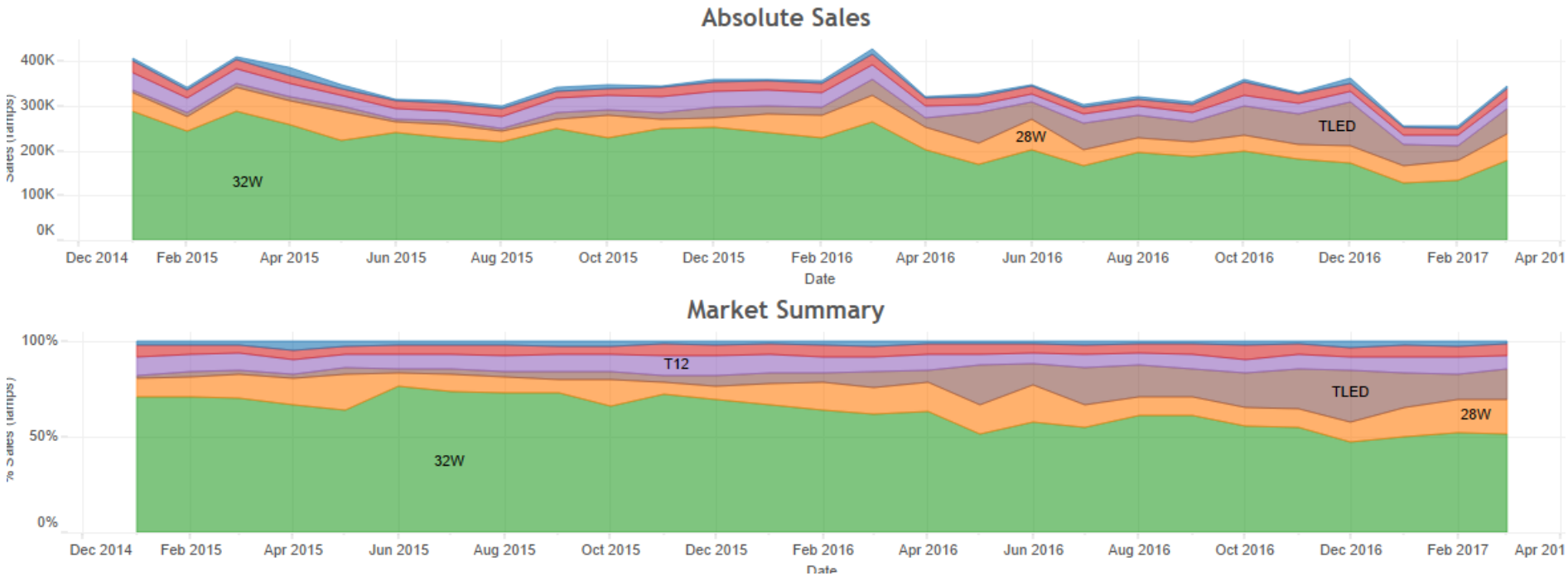
Engagement

Distributor	Start Date	Organization	Branches
CED Cascade	3/1/2017	1	17
CED Columbia	8/1/2016	1	17
Eoff Electric	1/1/2015	1	13
Grainger	5/1/2015	1	11
Graybar	12/1/2015	1	10
Interstate	5/1/2015	1	6
North Coast	2/1/2014	1	34
Pacific Lamp and Supply	1/1/2015	1	1
Platt	11/1/2013	1	85
Portland Lighting	12/1/2013	1	1
Stoneway	10/1/2015	1	19
United Lamp and Supply	3/31/2016	1	1
Enrolled as of Q1 2017		12	215
The Home Depot - Pro Desk	5/1/2017	1	89
CED Additional Locations	6/1/2017	1	24
Wesco	6/1/2017	1	14
To be Enrolled in Q2 2017		3	127

Market share since 2014



Reduced Wattage Lamp Replacement Sales Dashboard



- Tracking over 4 million
- Declining market but continued opportunity – 14% year
- Can see some leveling off of TLEDs ... ??

Next steps RWLR?

- Continue strategies to accelerate
 - Focus on restocking.. Get to 80%
 - Focus on FOMO
 - Focus on big guys
 - Track market closely
 - Ops plan for 2018??



Next steps Distributor Platform?

- Research to help LLC with distributor data and marketing strategies
- Work closely to help SCL re LED products
- Work with Market Strategy to ID additional opportunities
- Continue to improve data tools and collaboration with research teams

Thank you

- Questions?
- emiller@neea.org
- 503-688-9877

Window Attachments Surface Applied Films

Rob Curry



New advanced engineering

- Window film industry has **grown by leaps and bounds in recent years**
- Developments like **nanotechnology and advanced coatings** have significantly increased their performance
- Modern products which block more heat than light

Thermoplastic polymer

- Surface applied to inside of existing windows
- Designed to **reduce the amount of solar heat** transmitted through the glass
- Reducing energy use from 5 to 10%

Most common types

- **Solar control film**
- Spectrally selective film
- **Low-e** coatings
- Safety / security film
- Decorative film

Wide range of benefits:

- Increasing occupant **comfort and wellness**
- Increased UV fade protection
- Reduced glare
- Increased **safety and security**

Improved insulating value

- Some films improve single pane clear glass to **meet dual pane low-e specifications** without a mirror finish
- Highly reflective over the invisible infrared portion of the solar spectrum while being **only slightly reflective**

Certification Standard

- Window film comes in a range of shades from visually clear to darker shades of grey and bronze.
- More than 250 films have been **certified by the National Fenestration Rating Council**
- **International Window Film Association** provides unbranded information

15 year to lifetime warranties

- Manufacturers are confident enough that they will **warrant the film** from cracking, crazing, delaminating, bubbling, peeling, or discoloration
- **Also warrant the glass** from seal failure and/or glass breakage to match the existing glass manufacturer's warranty

Thank you!

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CAC – April 2017

Emerging Technology Update

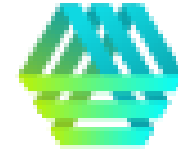
Rob Curry
Mark Rehley



Topics

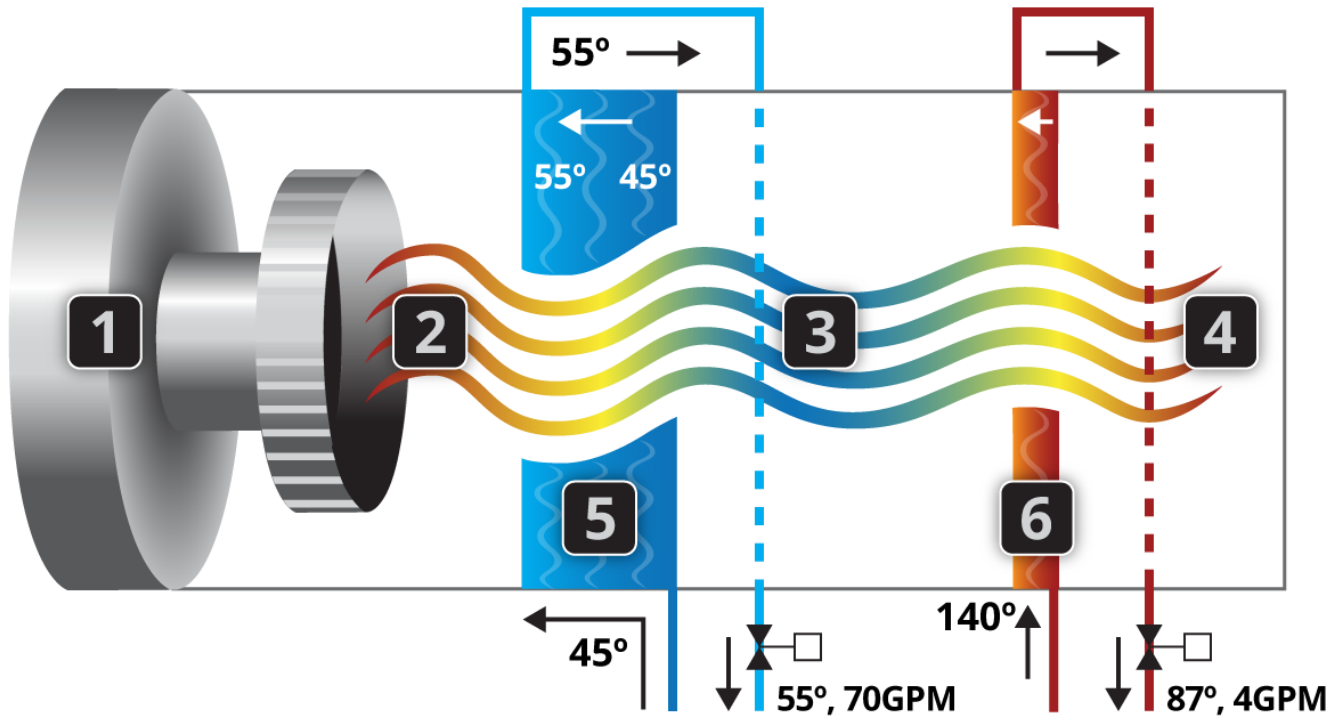
- Window Films
- ETCC Summit
 - IOTAS
 - Conservant Systems
 - Enlighted AIRE
 - ChillDyne

IOTAS

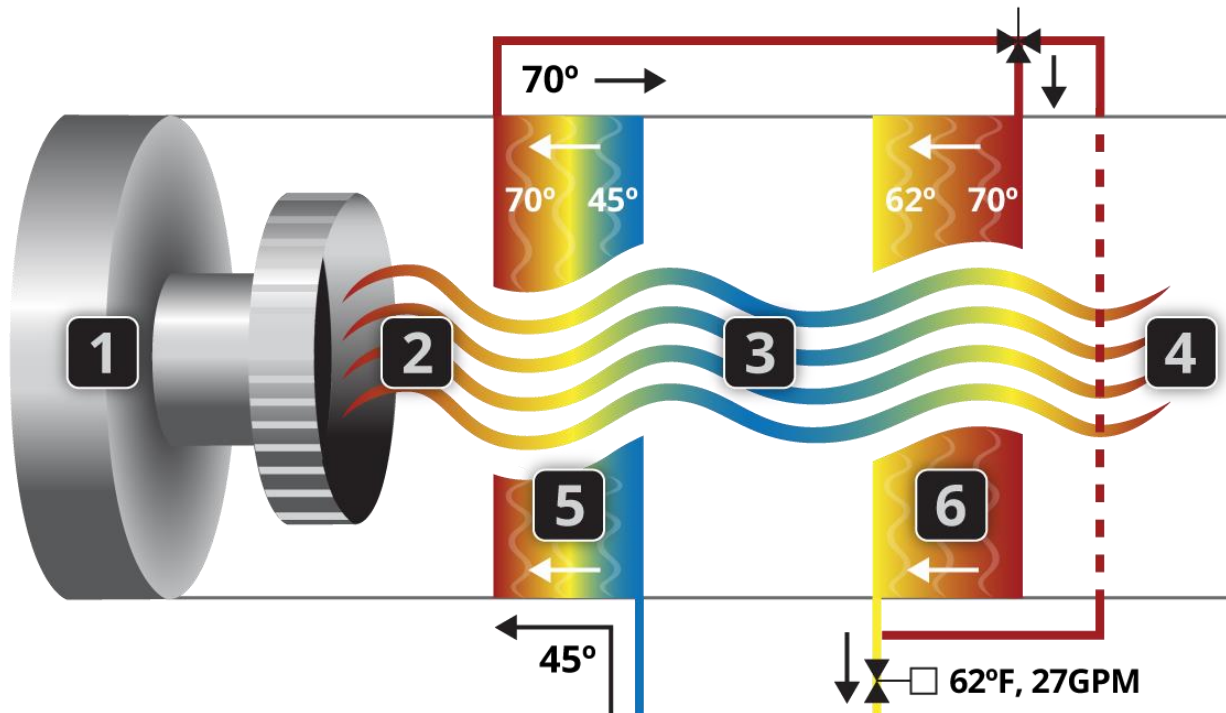


- Multifamily
- Personalized automation and controls
 - Lighting
 - Entertainment
 - Security
 - Cooking
- Extensible and Transferable
- <https://youtu.be/XXdFHmGbxdE>

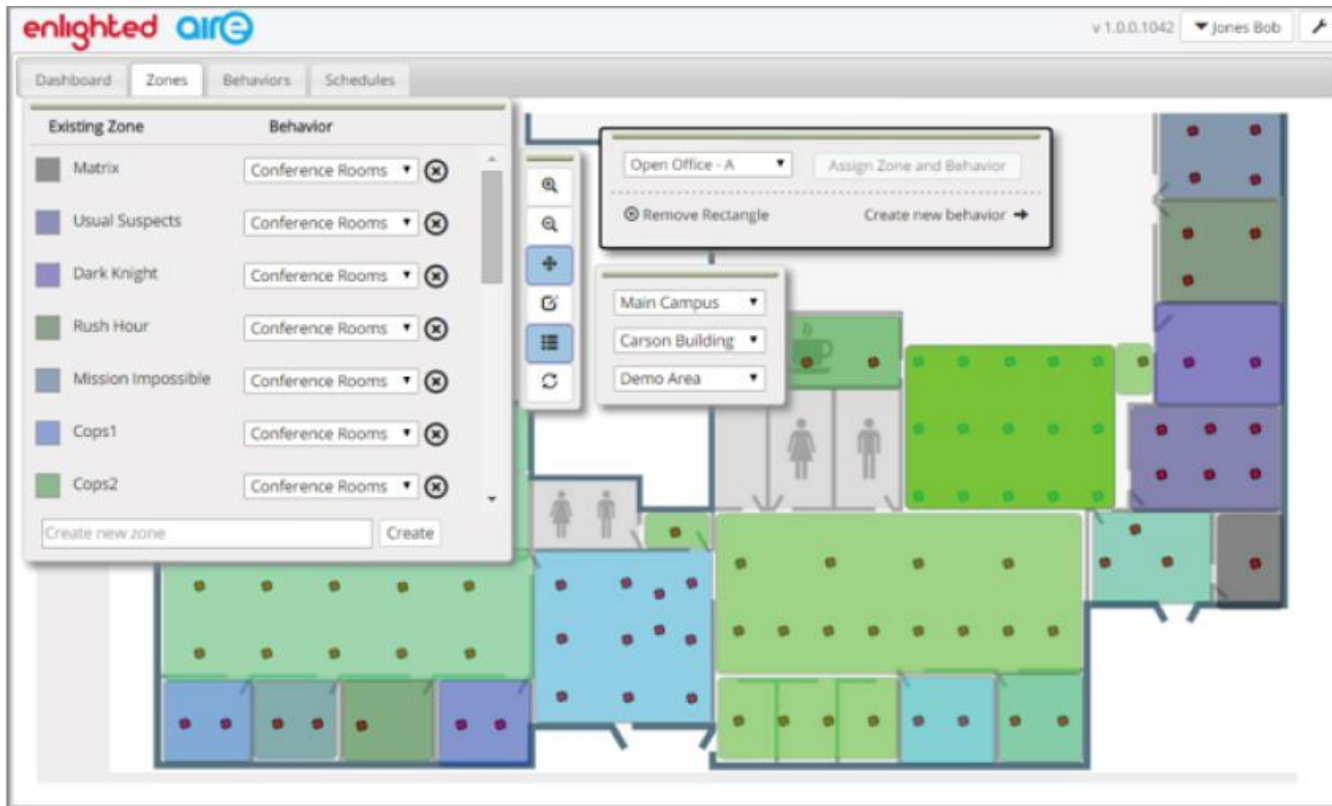
Conservent



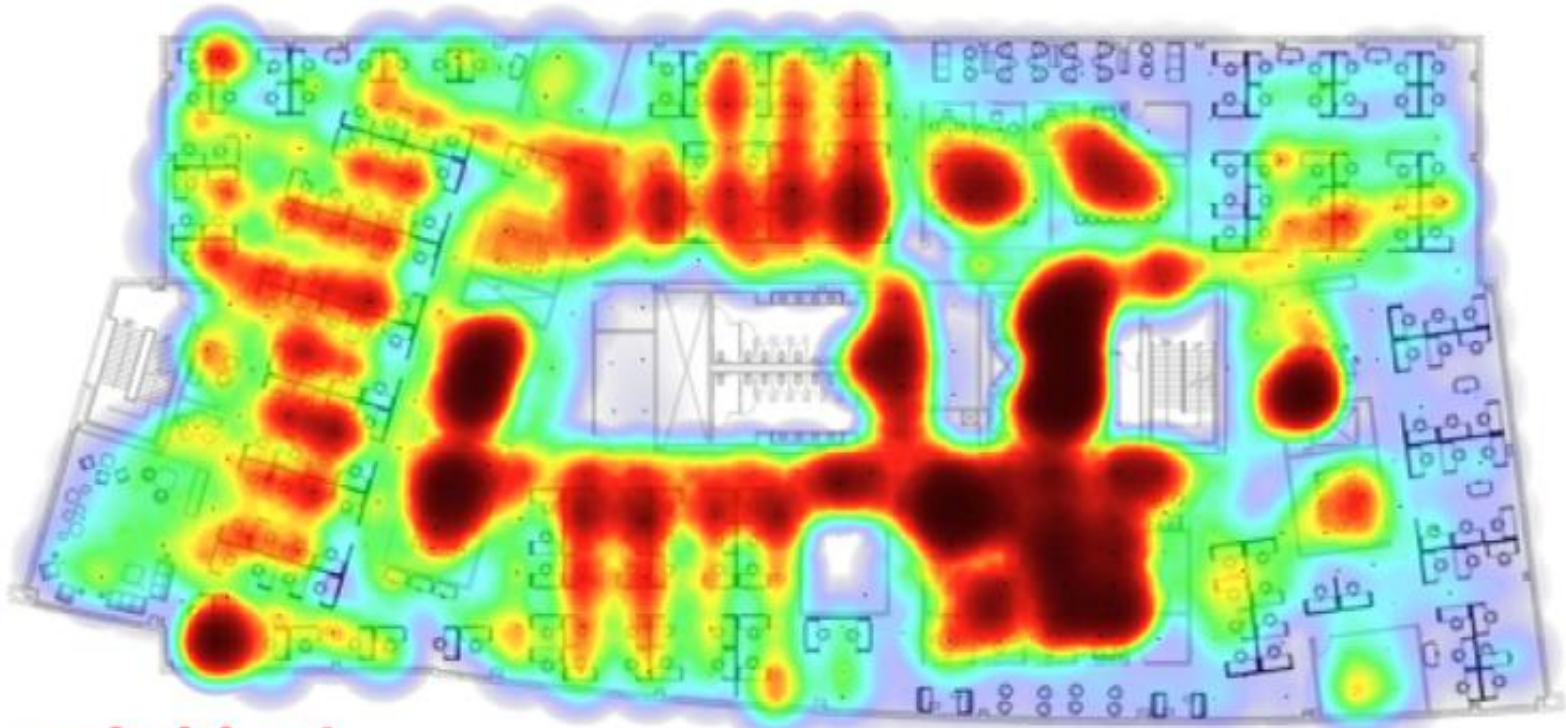
Conservent



Enlighted AIRE



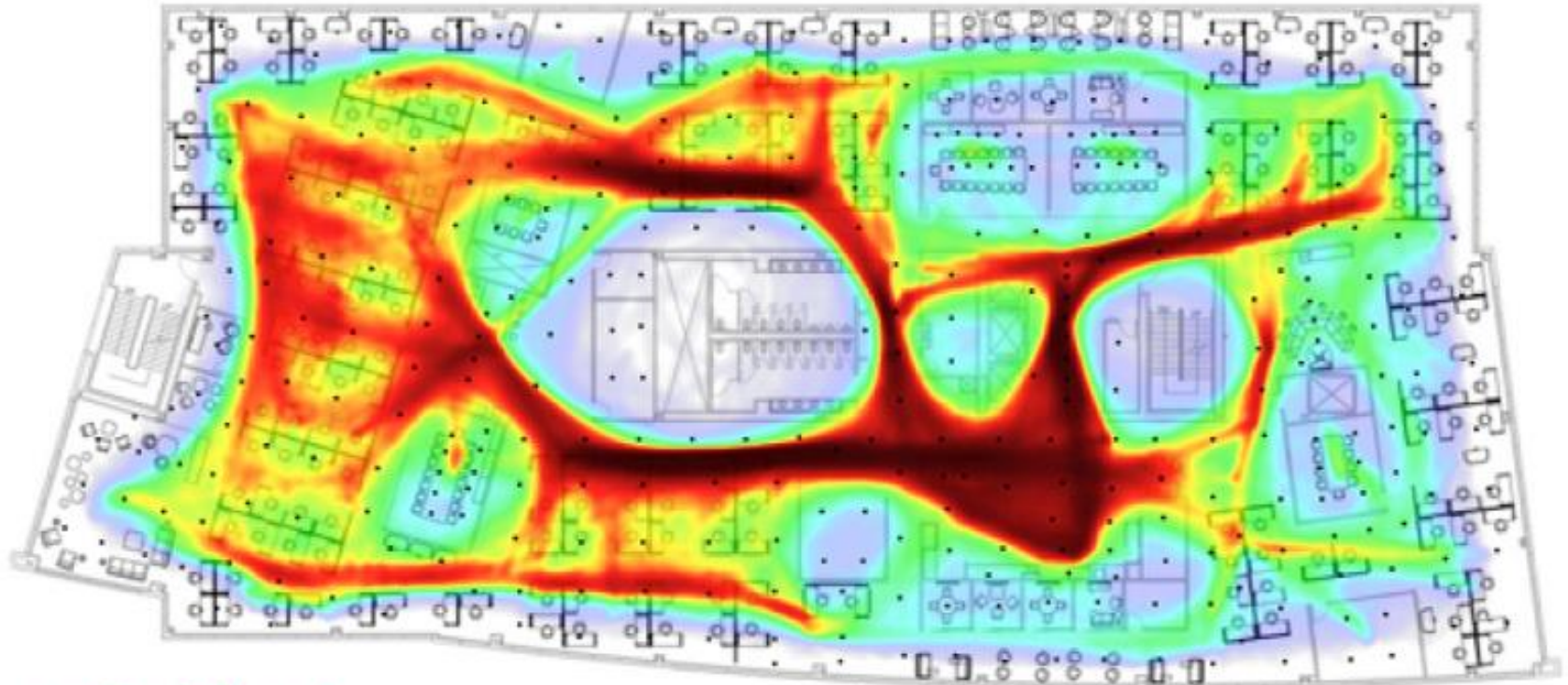
Enlighted - Space



enlighted

Demo Building - Floor 3

Enlightened Space



enlightened

Demo Building – Floor 3

CHILLDYNE

- <https://youtu.be/552tzND2Xx0>





Thank you!

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Wrap Up

- Public Comment?
- Feedback on the meeting:
 - Overall?
 - Agenda?
 - Packet materials?
 - What went well?
 - What could be improved upon?



Thank you CAC!!!

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