



Upstream Approaches to Commercial and Industrial Lighting Programs



Moderator: Gabe Arnold, PE, LC

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Panelists

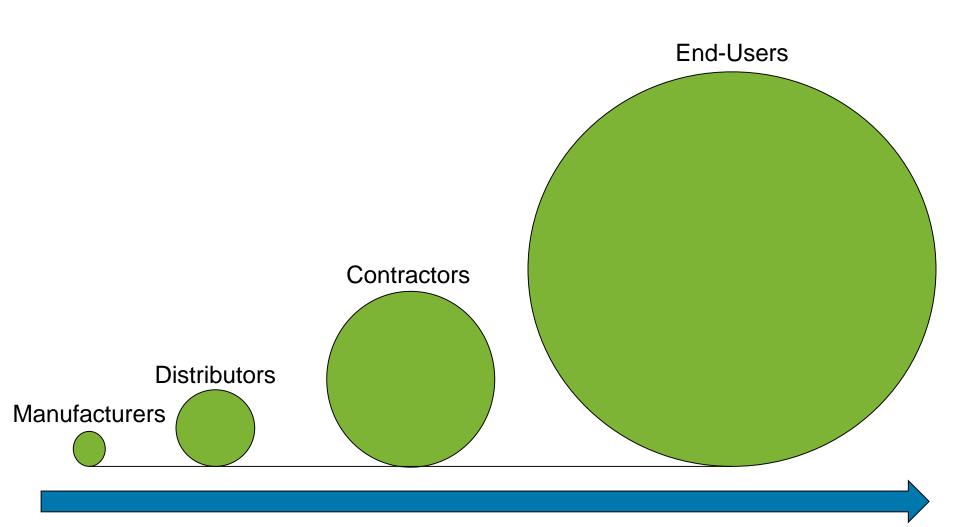
Dan Mellinger Lighting Strategy Manager Efficiency Vermont / VEIC



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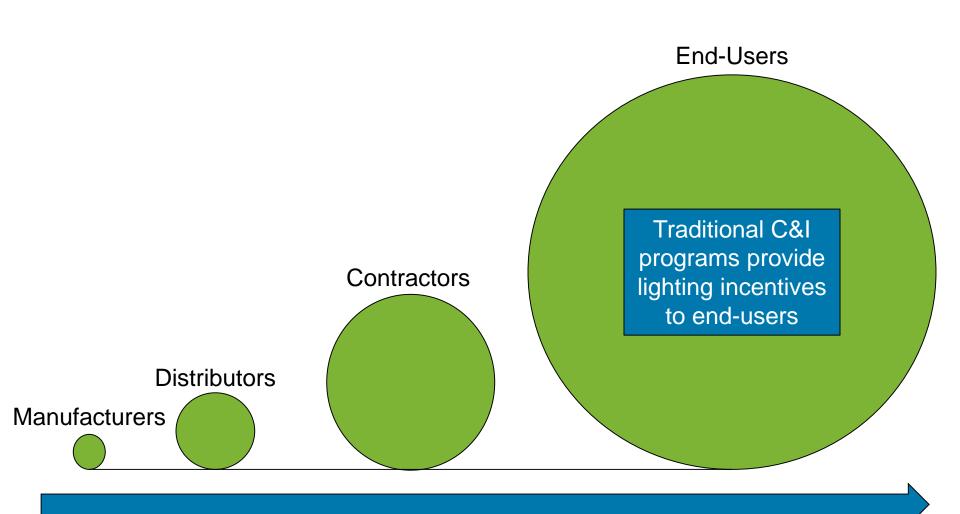






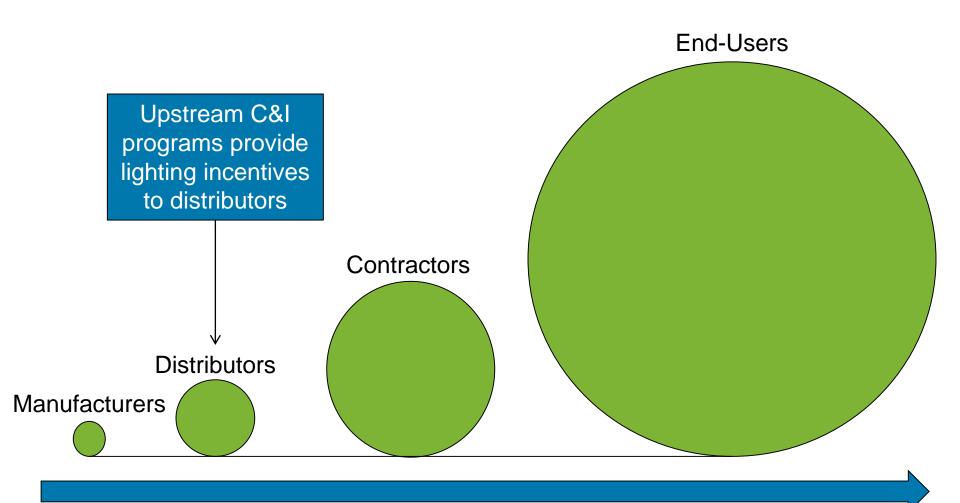
Commercial Lighting Supply Chain





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Why shift incentives Upstream?

Manufacturer/Distributor Perspective:

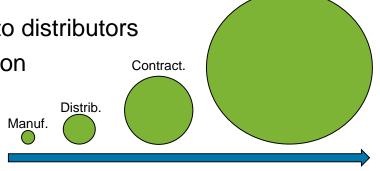
- Allows manufacturers/distributors to more directly utilize incentives to sell more EE products
- Acknowledges that many sales are based on lowest first cost
- Reduces or eliminates distributor risk of stocking and prioritizing selling of EE products
- A better business proposition compared to end-user rebates
- If the efficient product is the same cost to my customers and carries the same or better performance, why would I stock or sell less efficient product?"



Why shift incentives Upstream?

EE Program Perspective:

- Potential greater participation and savings compared to downstream
- Leverage market to reach more customers
- Quickly address stocking/availability barriers
- Streamlined and cost-efficient process for increased scale Users
 - Fewer touch points
 - Shift data collection responsibility to distributors
 - Electronic data upload and validation



Commercial Lighting Supply Chain



Upstream Program Design Considerations

- Losing customer touch point
- Lack of site-specific data for each installation (e.g. hours of use)
- EM&V & QA/QC
- Gaming of program rules
- Products sold, but not installed
- Products sold, but installed elsewhere
- Credit to EE program for providing incentive
- Confining sales to program or utility territory
- Paying incentive to distributor rather than ratepayer
- Overlap with continued downstream programs



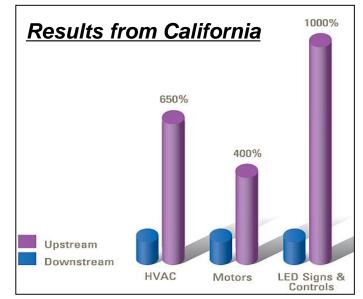
Upstream C&I Lighting Program Examples

- ▶ Efficiency New Brunswick (2007 2010)
 - www.efficiencynb.ca/commercial/commercial-lighting.html
- California and Nevada (2007 Present)
 - <u>www.cainstantrebates.com</u>
- Efficiency Vermont (2009 Present)
 - <u>www.efficiencyvermont.com/smartlight</u>
- ComEd (2011 Present)
 - <u>www.comed.com/business-savings/programs-</u> incentives/Pages/lighting-distributors.aspx
- Massachusetts and Rhode Island (2011 Present)
 - www.masssave.com/professionals/incentives/upstream-lighting



Upstream Approach also works with other Technologies

- California and Nevada Upstream Program also includes:
 - HVAC
 - Motors
 - Water Heaters
 - Commercial Food Service Equip.
- Massachusetts and Rhode Island Upstream expanding to:
 - HVAC (Q2 2013)
 - Refrigeration (future)
 - Commercial Food Service Equip. (future)



Average Annual Energy Efficiency Program Performance Downstream vs. Upstream Source: Daniel Cornejo, Energy Solutions

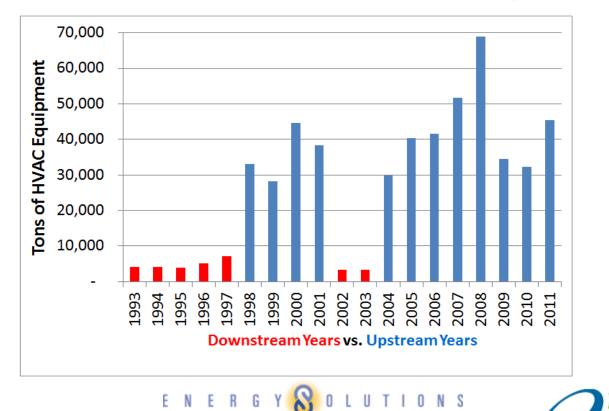
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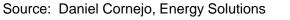


Compelling Upstream HVAC Results from California

1993-1997, and 2002/3: Downstream program approach

1998-2001, and 2004-2011: Upstream program approach





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Integrated Energy Resources

Thank you

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Discussion Questions

- What has allowed you to try this approach? Would other program administrators be able to do something similar or are you operating under unique circumstances?
- How is your messaging and promotion similar to/different from traditional programs?
- What are the market conditions that might make one upstream approach relatively more favorable than another approach?
 - Challenges of discontinuous market
- To what extent does the upstream C&I approach transform markets?



Discussion Questions

- Are comprehensive savings opportunities lost with the upstream approach?
- What are the components of the MOU with Manufacturers?
- What are the components of the agreement with Distributors?
- Are there challenges with collecting sales data from manufacturers or distributors?



Discussion Questions

- Who are the key target audiences for program outreach and how might the approaches discussed help enable engagement and collaboration?
- What are key aspects to know and understand about the supply chain actors to inform program participation criteria (e.g., what information will distributors need to be able to share with programs to make the program work and how do you deal with business sensitive sales info?)
- What other products/markets might be well suited for this type of approach and why? Would you ever shift all of your C&I lighting equipment incentives upstream? Why or why not?

