

# Upstream Strategies for Commercial and Industrial Markets

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# Why shift incentives Upstream?

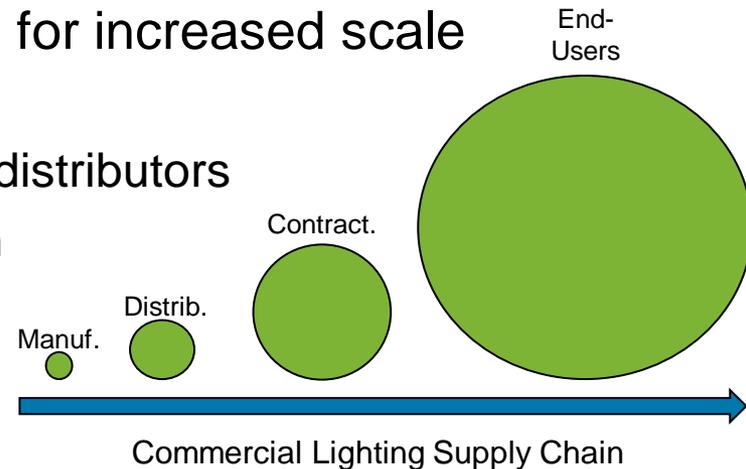
## Manufacturer/Distributor Perspective:

- ▶ Allows manufacturers/distributors to more directly harness power of incentives to sell more EE products
  - Leverages upstream sales force--they are better at selling their product than program administrators
  - They are engaged with transaction at the “right time”
  - They bring along contractors
- ▶ Acknowledges that many sales are based on lowest first cost
  - Reduces or eliminates customers up-front cost barrier with lower utility incentives
  - Addresses wholesale incremental costs and may leverage State sales tax
- ▶ Reduces or eliminates risk of stocking and prioritizing selling of EE products
  - “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?”
  - Quickly transforms markets and brings in laggard distributors

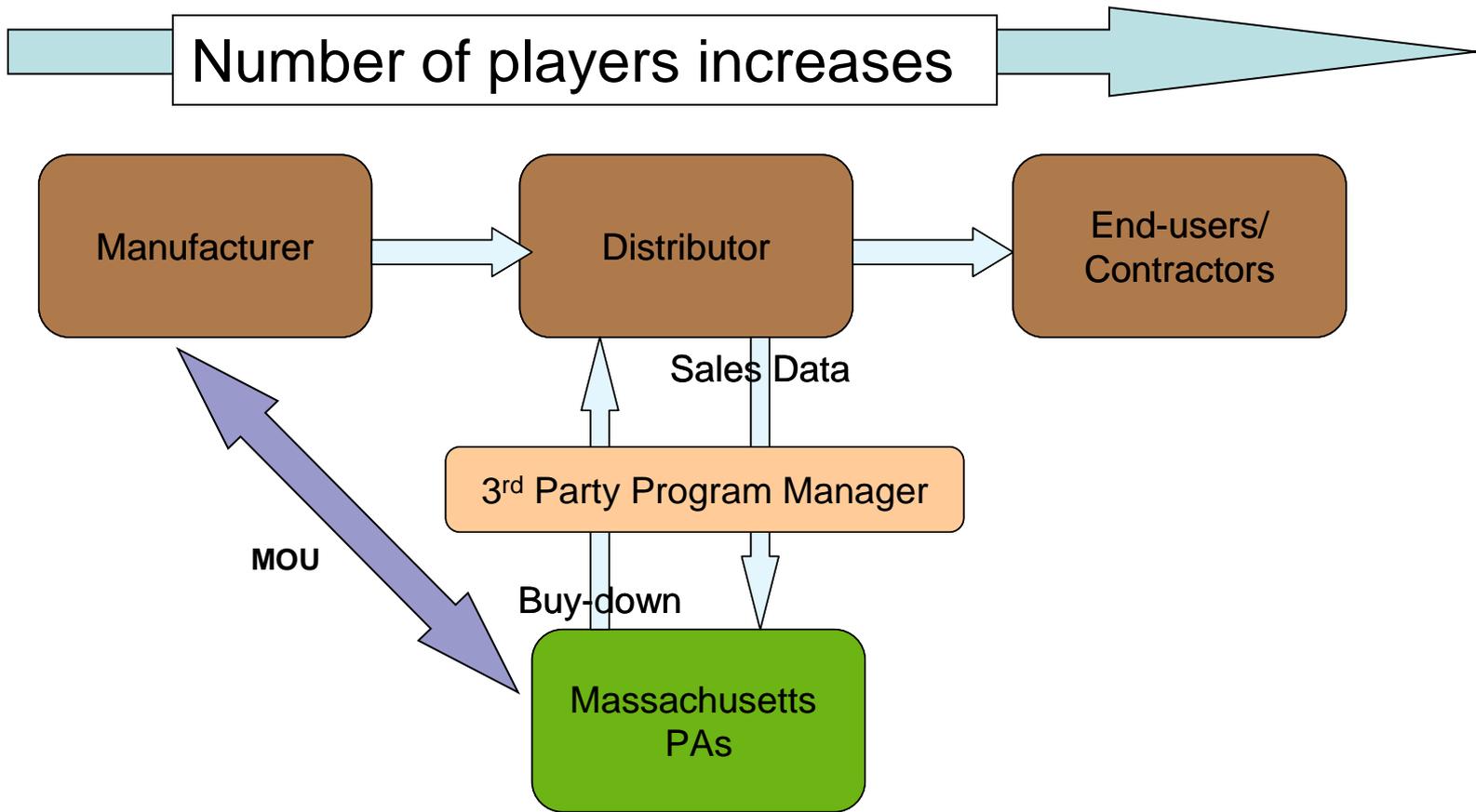
# Why shift incentives Upstream?

## EE Program Perspective:

- ▶ More effective method to engage the supply chain
- ▶ More participation and savings compared to downstream
- ▶ Leverage market to reach more customers
  - Particularly beneficial for market-driven products and purchases (no need to find customers at correct moment, they find the contractors and distributors, who do the selling for you)
- ▶ Streamlined and cost-efficient process for increased scale
  - Fewer touch points
  - Shift data collection responsibility to distributors
  - Electronic data upload and validation
  - Easier way to capture real-time market saturation data
  - Lower cost per unit savings



# Upstream Model in the Value Chain



Buy down price of high efficiency equipment at the wholesale level

# Considerations Compared to Traditional Downstream Programs

- ▶ Lose customer touch point
- ▶ Lack of site-specific data for each installation? (e.g. hours of use)
- ▶ EM&V challenges and opportunities
- ▶ 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

# Keys to Success

1. Robust distributor outreach program
  - Training
  - Account management
  - Regular communication
2. Engagement with manufacturers to **drive the program from above—including MOU**
3. Marketing (website, print collateral) to **drive participation from below—including cooperative advertising with manufacturers and distributors**
4. Well publicized qualifying **eligible products**
5. **Distributor agreement / MOU** to clearly outline program rules, data and dollar transfers, etc.

# Lessons Learned

1. Engage with the market early. Need to fully understand the market channels and unique market actor issues, maintain flexibility to accommodate existing systems and business models.
2. Distributors are incredibly “creative.” If there is any possible way to game the system, they will find it.
  - Clear rules and guidelines within the agreement/MOU help
  - On-going communication and outreach is essential
3. Program must be flexible enough to quickly change rebate levels or modify other aspects that may not be working
  - Product pricing, especially with LEDs, can change fast

## Lessons Learned, cont.

1. Consider restricting distributor participation in-state distributors and border communities—depends on territory and concerns about leakage
  - Can be difficult to manage out-of-state and on-line distributors.
  - Establish procedures around leakage (ignore, estimate, NTG adjustment, engage neighboring PAs to contribute)
2. Crediting savings to specific customers can be more difficult
  - Batch processing provides significant administrative cost savings
  - Difficult to capture customer-specific operating hours or other features
  - Drop ship and contractor provided customer names and addresses generally sufficient
  - Preserve right for on-site inspections, and perform randomly

# New England C&I Lighting Experience

## Timeline (MA/RI)

- ▶ Sep 2011 – Upstream Lighting (RWT8, T5HO) launched in MA
- ▶ Nov 2011 – LEDs added
- ▶ Feb 2012 – Launched in RI (GRID)
- ▶ Jun 2012 – Added new LED products

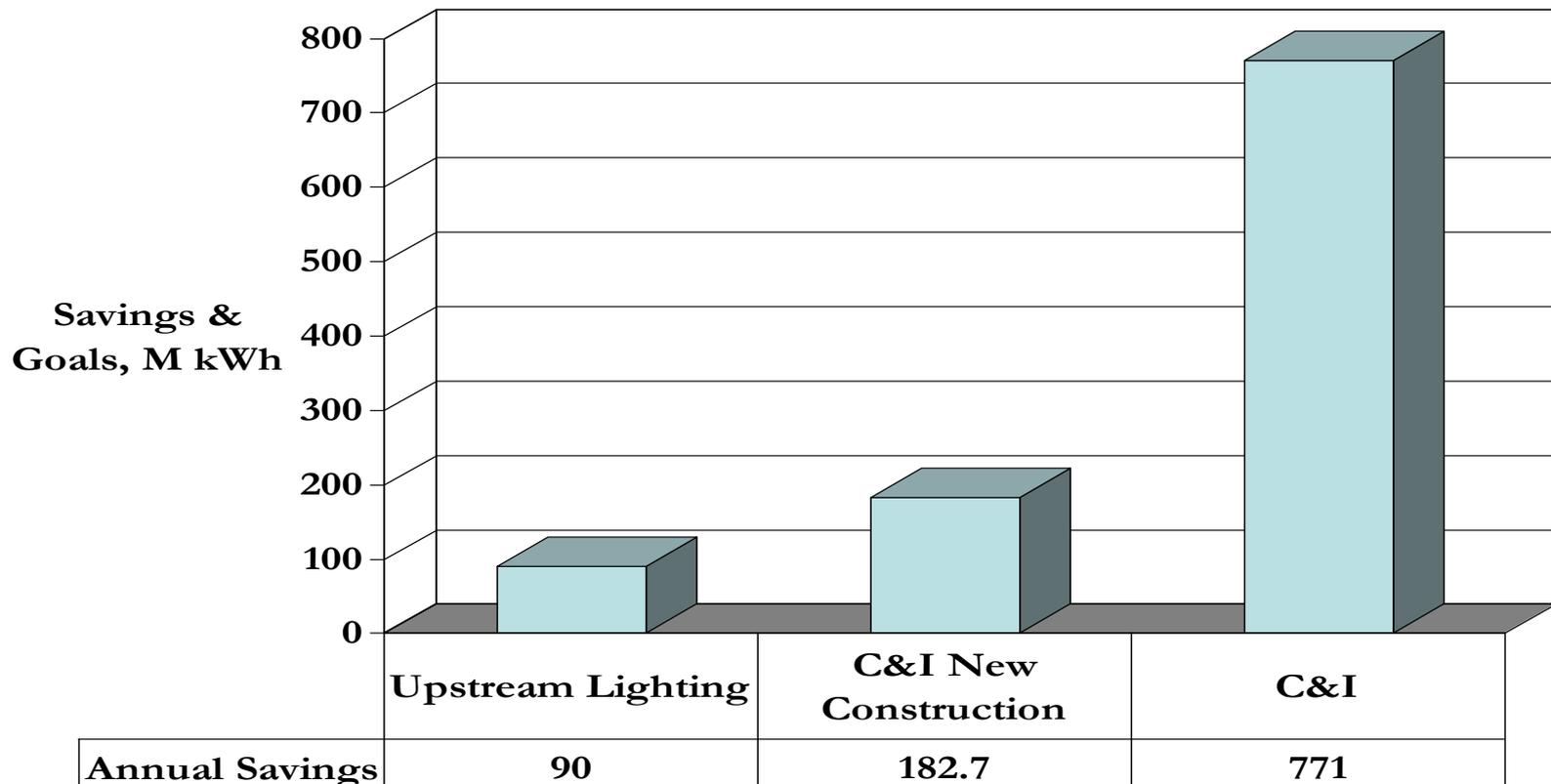
## Statistics (MA/RI)

- ▶ 16 Manufacturers including GE, Philips, Sylvania, Toshiba
- ▶ 50+ Distributors
- ▶ 2012 results: > 2,000,000 lamps, > \$18 Mil Incentives provided
- ▶ 2012 savings: ≈ 100,000 MWh, > 0.2% of load, @ 21¢/annual kwh

## Results (MA/VT)

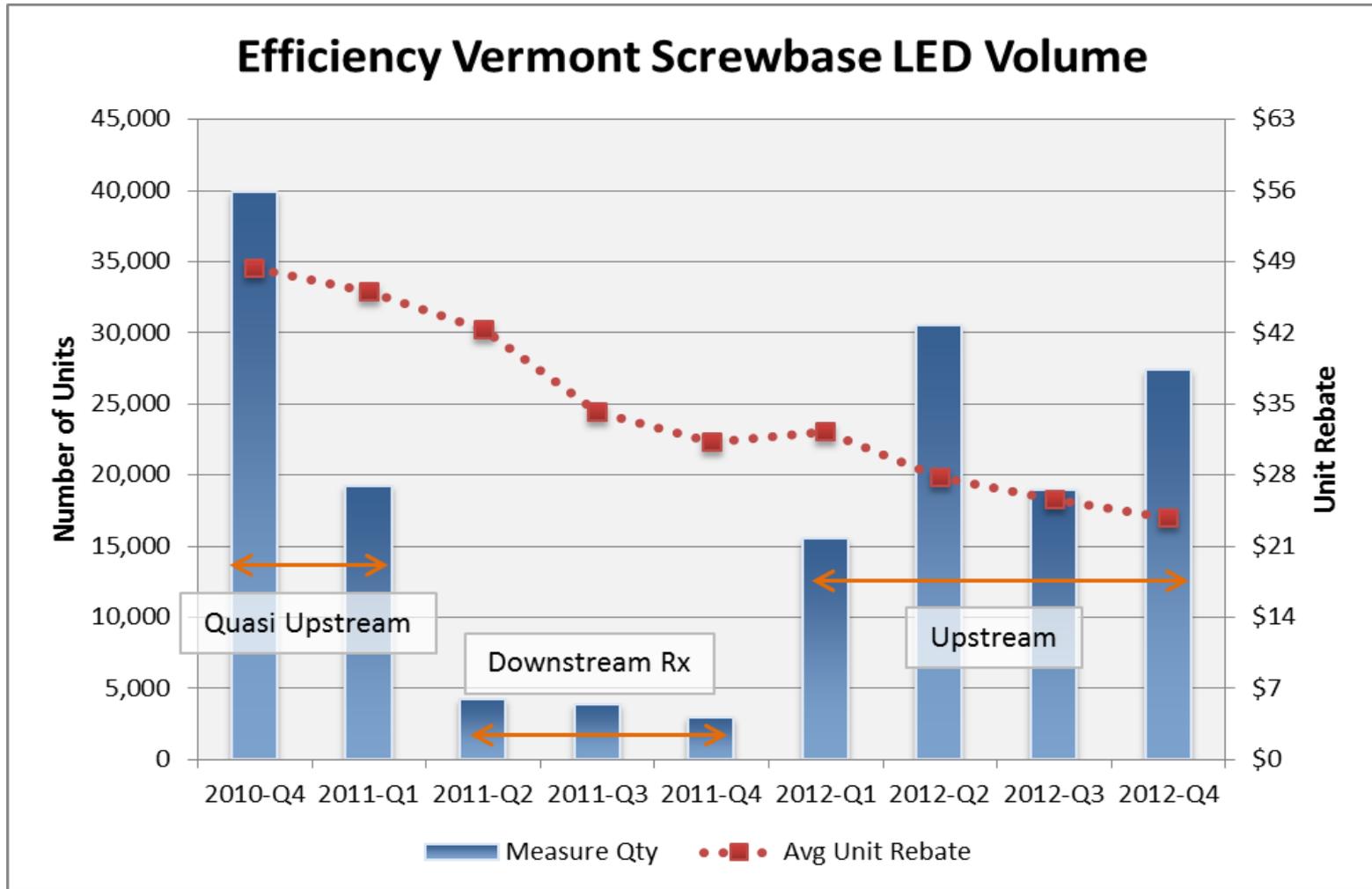
- ▶ After just one quarter of program delivery Massachusetts sales of LEDs accounted for 30% of *total national sales of LEDs* (source: Sylvania)
- ▶ After one year, LEDs accounted for 30% of Efficiency Vermont C&I lighting savings, grew to >50% in second year

# Massachusetts Contribution to Program Savings (2012 Program Year)



Upstream lighting savings are gross, pre-evaluation savings

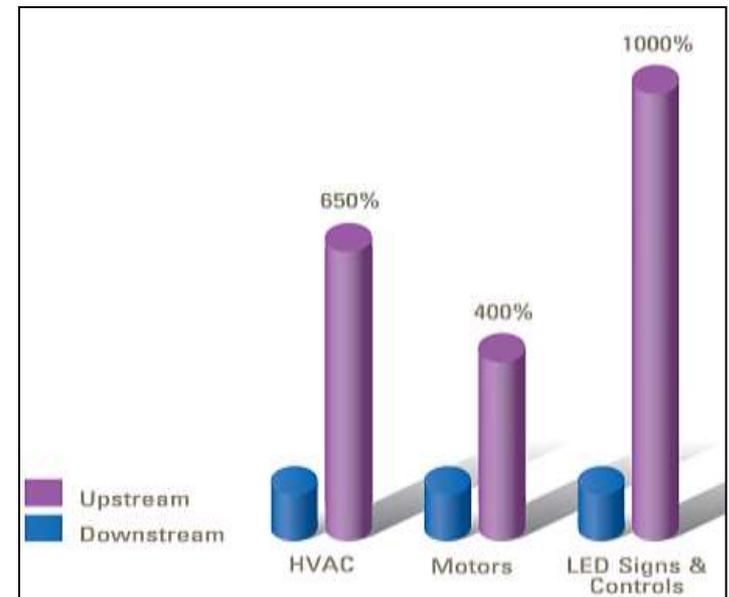
# Vermont Success with LEDs



# 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 (launched Q2 2013)
  - Refrigeration (future)
  - DHW (future)
  - Commercial Food Service Equip. (future)

## Results from California

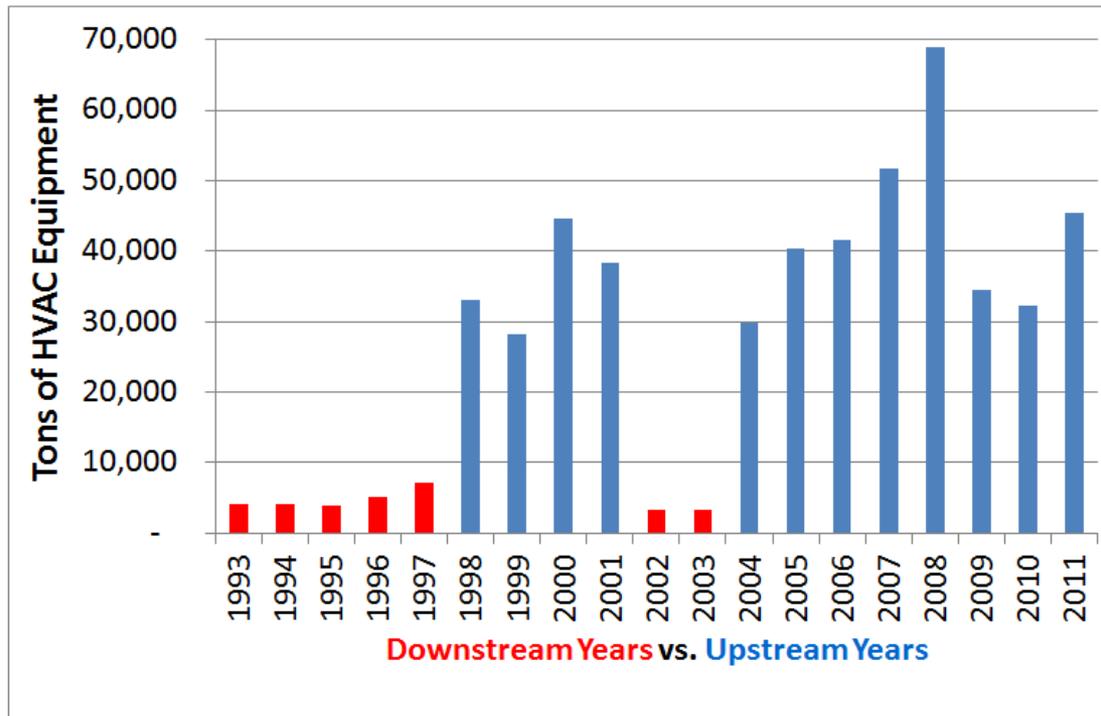


Average Annual Energy Efficiency Program Performance  
Downstream vs. Upstream  
Source: Daniel Cornejo, Energy Solutions

Focus on widget-based products purchased at time of natural replacement/new construction

# Compelling Upstream HVAC Results from California

- ▶ 1993-1997, and 2002/3: Downstream program approach
- ▶ 1998-2001, and 2004-2011: Upstream program approach





*Integrated Energy Resources*

Thank you

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