

**Driving Upstream Markets
through
Strategic Partnerships
& Excellence in
Supply Chain Management**

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Strategic Planning
Manager, HVACR**
ACEEE Summer Study
August 23, 2016



**Vermont
Energy Investment
Corporation**

About VEIC

- Nonprofit with **30 years** of reducing economic and environmental costs of energy
- Comprehensive results
- **Energy efficiency, renewable energy, and transportation**
- **Program design, planning and evaluation, policy, advocacy, and research**



veic.org

Efficiency
Vermont

EFFICIENCY\$MART



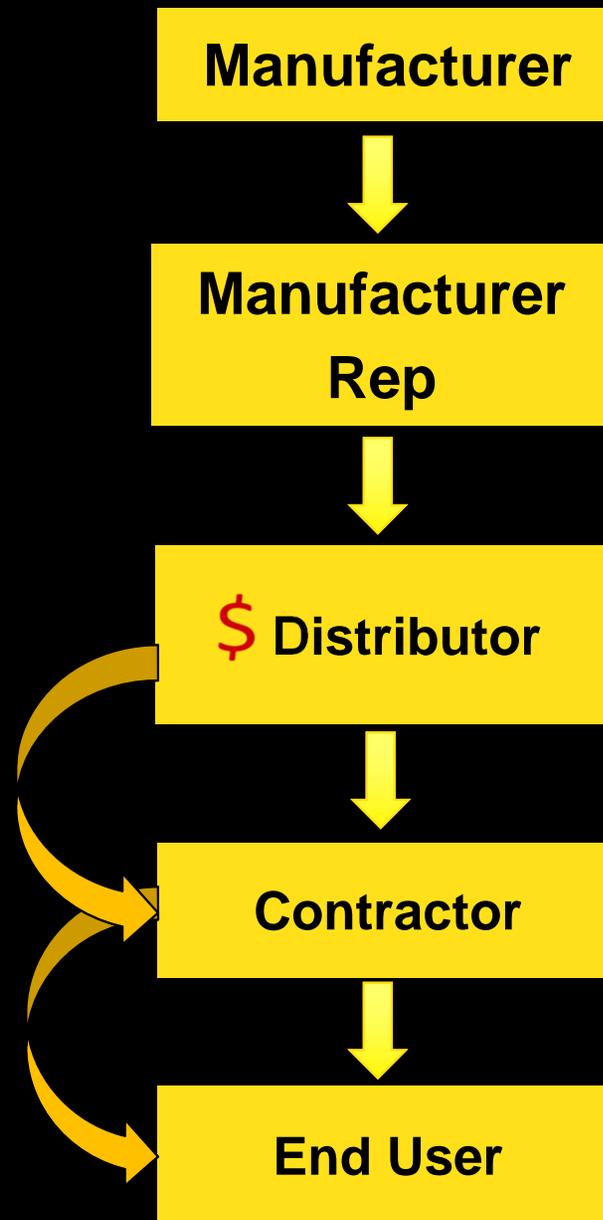
DC
SUSTAINABLE ENERGY
UTILITY

Examples of VEIC's Clients



HVACR Upstream

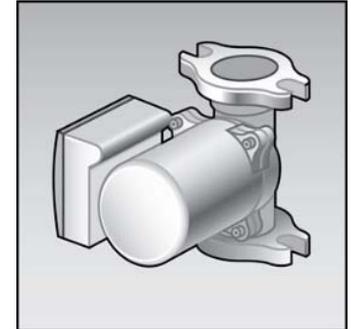
What is an upstream program?



Benefits of Upstream

1. Promotes increased availability, sales, & installation of efficient equipment
2. Influences distributor stocking practices
3. Diminishes financial barriers
4. Facilitates market transformation

Participating Manufacturers



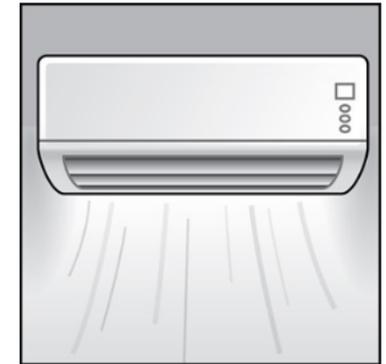
The new degree of comfort.™



Participating Manufacturers



Haier



Panasonic

In the future...



Participating Efficiency Vermont Upstream Distributors

15 Distributors, 47 Locations



F.W. WEBB COMPANY



Blodgett SUPPLY



Appalachian Supply, Inc.



HVACR Upstream Approach

VEIC's Approach to Upstream

1. Project planning
- 2. Establish value proposition**
- 3. Mapping the supply channel**
4. Eligibility & Performance request
- 5. Data collection**
6. VEIC 101 / 201 planning sessions
- 7. Establish incentive levels**
- 8. Administration / management fees**
- 9. Develop SMIT plans**
10. PDA / MOU

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Understand Distributors' Profit Model

Return on Net Assets (RONA) =

Distributor Net Income

Inventory + Accounts Receivable – Accounts Payable

Distributors' Profit Model

RONA driver	Consideration
Increase gross margin (GM), gross profit (GP) & net income (NI)	<ul style="list-style-type: none">• Energy-efficient products affect GM, GP, & NI• Increase GM
Decrease inventory investment & increase turnover	<ul style="list-style-type: none">• Collaborative sales, marketing & training• Intensive product & program training• Incentives increase market demand• NO manufacturer penalties
Accounts Receivable (AR)	<ul style="list-style-type: none">• Avg. AR collection 50 - 55 days; Target < 35 days
Accounts Payable (AP)	<ul style="list-style-type: none">• Avg. AP terms 30 - 35 days; Target: 45 - 240 days

Distributor Value Proposition

A strategic partnership

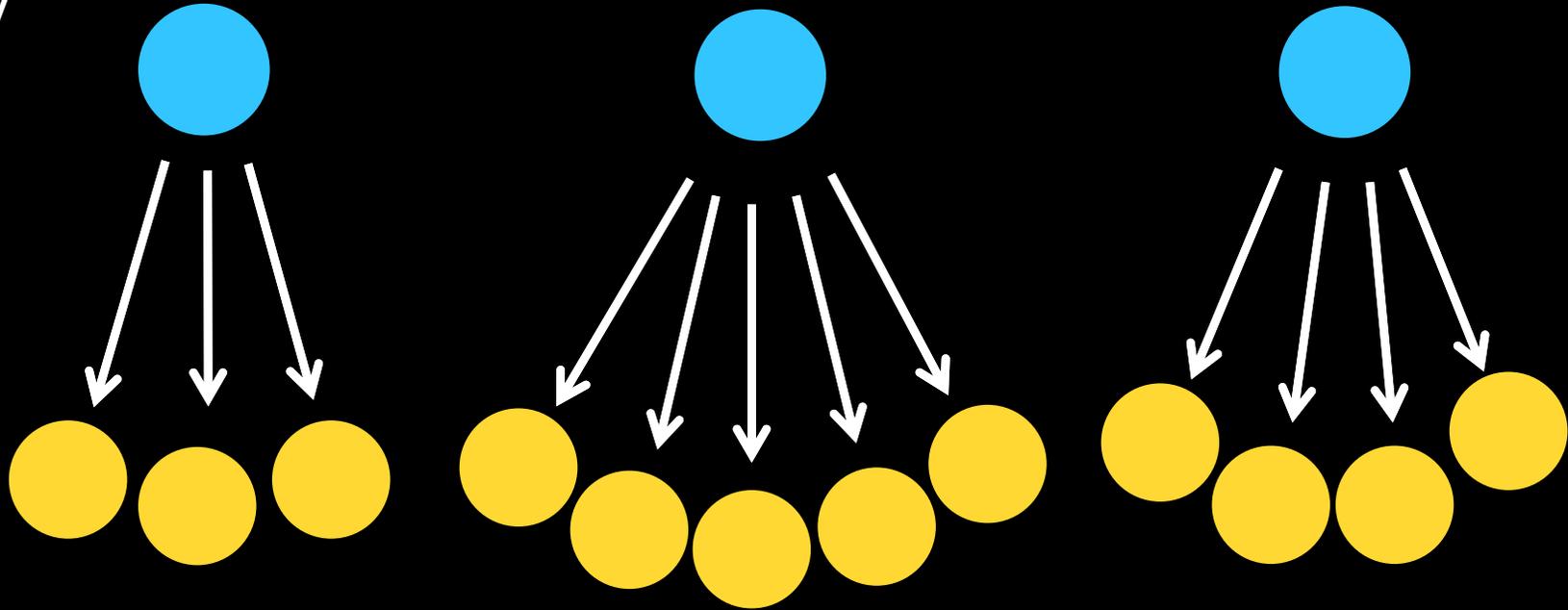
Factor	Standard pump	HPCP pump	Variance
Resale from distributor to customer	\$65	\$165	\$100
Distributor cost (estimate)	\$52	\$120.25	\$68.25
Incentives at distributor's point of sale		\$100	
Resale value, with \$100 incentive to distributor's customer	\$65	\$65	
Gross profit per circulator pump	\$13	\$44.75	$\$31.75 / \$13 =$
Gross margin per circulator pump	20%	27%	244%
Gross profit generated from 10,000 units / year	\$130,000	\$447,500	\$317,500

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TARGET: Use Supply Channel Approach

Manufacturers /
Manufacturer
Reps

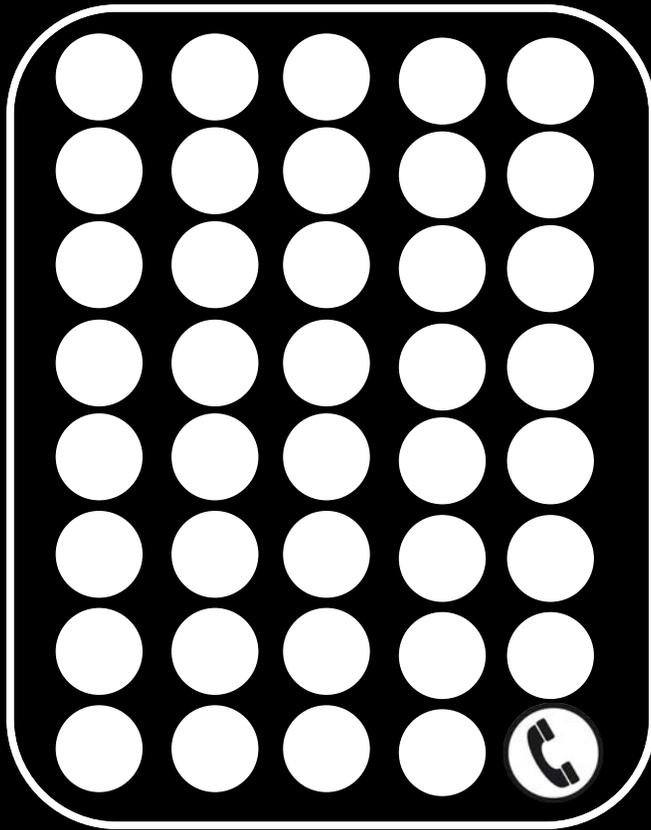


Distributors

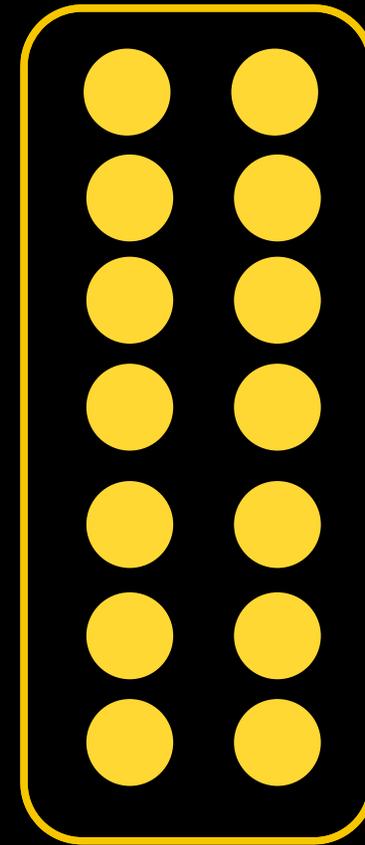
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Optimize the Collection of Transactional Data



40



14

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HVACR Upstream Incentives & Fees

Upstream program	Current incentive / unit	Current administration / management fee / unit	Comments
HPWH 	\$400	\$65	<ul style="list-style-type: none"> • Aggressive incentive & fee • Sales under duress (95%) • Small window of upsell opportunity
CCHP 	\$300 single zone \$400 multi-zone	\$50	<ul style="list-style-type: none"> • Aggressive fee • Complex sale • Inventory investment
HPCP 	\$50 \$200 \$600	\$3 \$3 \$50	<ul style="list-style-type: none"> • Tiered fee: \$ / MWh

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SMIT:

Sales, Marketing, Inventory & Training

- **Internal / external stakeholder planning meetings**
- **RFI (Request for information) to suppliers**
- **Suppliers: Develop & present SMIT plan**
- **SMIT strategy planning sessions**

SMIT Examples

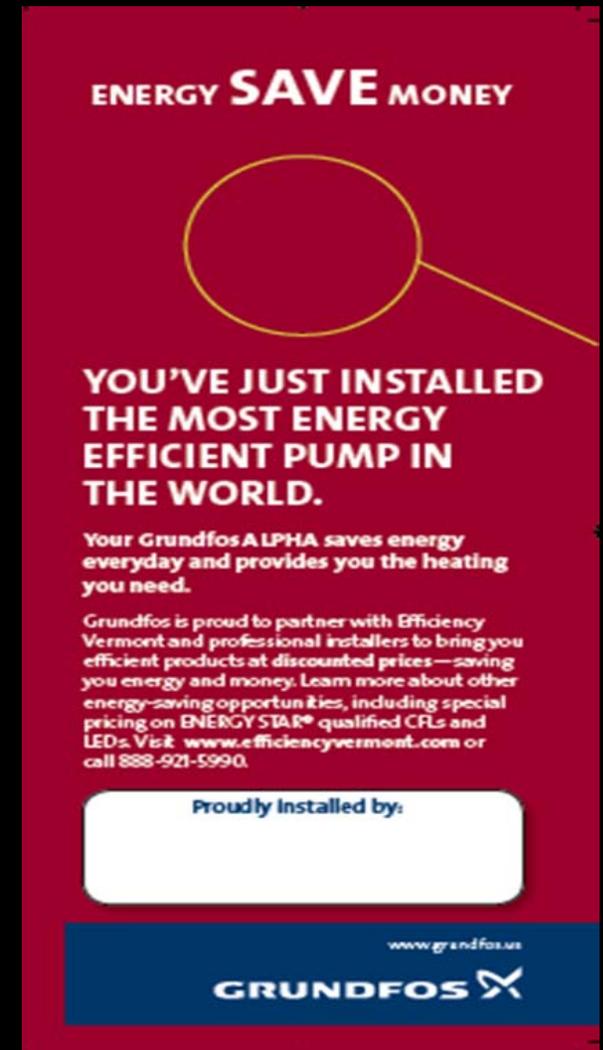
Joint Marketing Efforts

Challenge: Communicate end-user benefits of upstream programs to contractors & customers

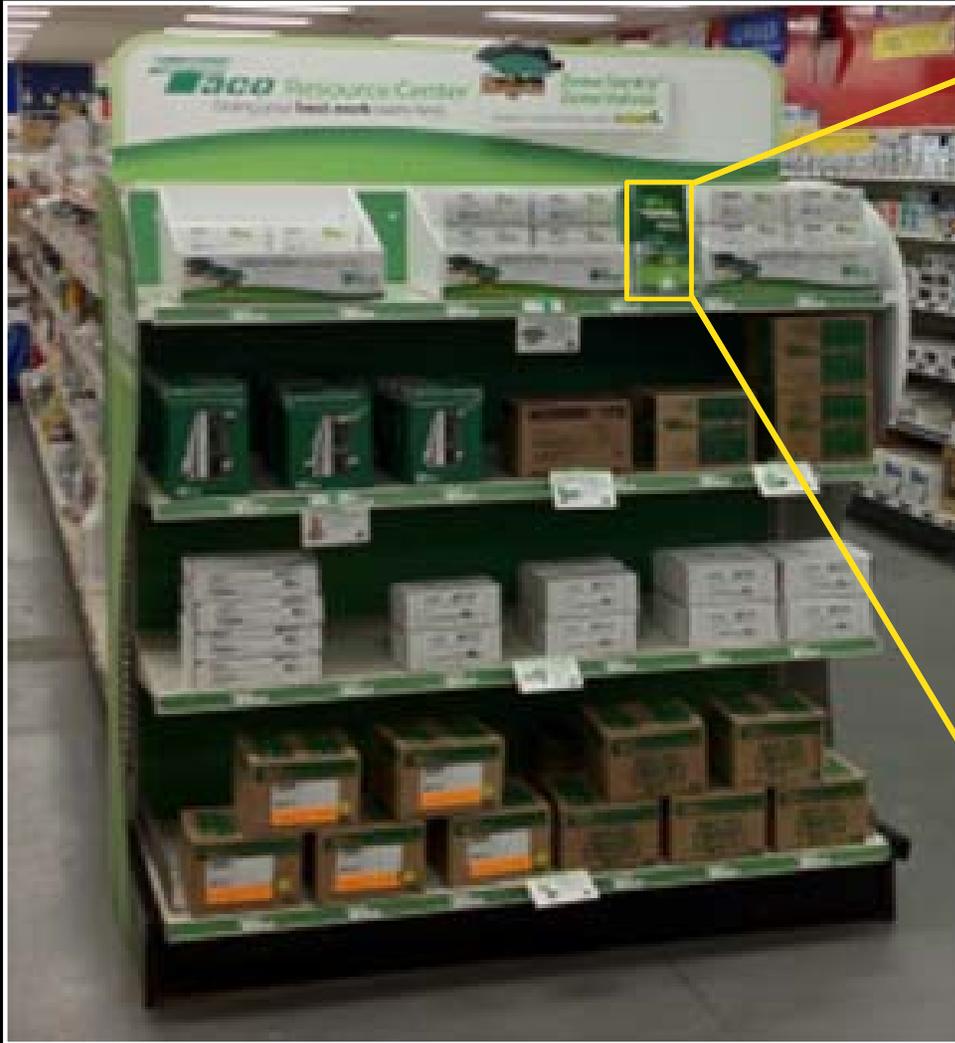
Solution: Visual materials



Box sticker



HPCP Joint Marketing Efforts



High-Efficiency HVACR Products for the price of conventional

Funded by Efficiency Vermont

Find a full list of qualifying HVACR products and discounts at: www.efficiencyvermont.com/upstream
Or call 888-921-5990 for more information.

Discounts effective 7/1/2015 through 12/31/2015



Everybody wins

Now you can provide the energy-efficient HVACR products your customers are looking for—at deep discounts.

End-use customers will enjoy greater comfort and lower bills, contractors and distributors will increase sales and customer satisfaction, and all of Vermont benefits through lower energy demand and related costs.

How does it work?

Efficiency Vermont subsidizes the cost of qualifying efficient products by paying rebates directly to distributors, who pass the savings on to installers, who then pass these savings on to end-users.

Contractors purchase qualifying products, provide end-user information, and receive in-store discount.

Call 888-921-5990 for more information.



COLD-CLIMATE HEAT PUMPS

UP TO A \$400 DISCOUNT

Cold-climate heat pumps heat and cool homes at a fraction of the cost of conventional heating and cooling. By moving heat rather than generating it, heat pumps typically consume much less energy than traditional electric, propane, or oil heating systems. Depending on the system they offer, heat pumps can save between \$5,000 and \$25,000 over the lifetime of the unit.

Visit www.efficiencyvermont.com/echppartners for full product list, participating distributors, and more information.

HEAT PUMP WATER HEATERS

\$400 DISCOUNT

Heat pump water heaters can cost less than half as much to operate compared to traditional electric resistance water heaters, and save as much as \$4,000 over the lifetime of the unit. In addition to providing domestic hot water, heat pump water heaters also dehumidify the space around them.

Visit www.efficiencyvermont.com/hpwhpartners for full product list, participating distributors, and more information.

Not available for natural gas conversions. As of January 1, 2016, Efficiency Vermont will no longer provide a discount for Heat Pump Water Heaters that are 55 gallons or larger.

HIGH-PERFORMANCE CIRCULATOR PUMPS

DISCOUNTS VARY BY MODEL

Circulator pumps use advanced controls and brushless motor technology to optimize pump operation, resulting in lower energy use up to 85% compared to conventional circulator pumps.

Visit www.efficiencyvermont.com/bumps for full product list, participating distributors, specific discounts, and more.

Thank you for purchasing & installing an

ENERGY EFFICIENT HEAT PUMP WATER HEATER!

Enjoy the years of energy savings ahead of you!

Visit www.efficiencyvermont.com for more information

GOOD NEWS

If you or your contractor purchased your unit from a participating HVAC distributor, you have already received the maximum \$400 rebate through Efficiency Vermont. This rebate cannot be used in conjunction with any other rebate offered by Efficiency Vermont. Please see www.efficiencyvermont.com/hpwhdistributors for a list of participating distributors.



Efficiency Vermont

You just made a very smart decision

By installing a cold-climate heat pump, you'll save energy and money and be more comfortable, too.

Here are a few ways to get the most out of your heat pump:



SET IT AND FORGET IT

Set your temperature preferences and don't change them unless you're leaving for more than a week.



AVOID DUELING HEAT SOURCES

Set your back-up system 10° lower than the heat pump, so it won't kick on unless needed.



AIR SEAL AND INSULATE

The tighter your home, the less energy your heat pump will need to keep you comfortable.

GOOD NEWS: YOUR CONTRACTOR IS SMART, TOO.
Your unit was purchased at a special price from a participating distributor, thanks to up to a \$400 discount from Efficiency Vermont.

Want to save even more? Keep reading ▶

888-921-5990

www.efficiencyvermont.com/coldclimateheatpumps

Efficiency Vermont

More smart ways to save, brought to you by Efficiency Vermont:

HEAT PUMP WATER HEATERS

\$400 OFF REGULAR PRICE

HIGH PERFORMANCE CIRCULATOR PUMPS

DISCOUNTS VARY BY MODEL

CLOTHES DRYERS

UP TO \$400 CASH BACK

REFRIGERATORS

UP TO \$75 CASH BACK

Find information about these deals and more by visiting www.efficiencyvermont.com or call 888-921-5990.

Efficiency Vermont

128 Lakeside Avenue, Suite 401
Burlington, VT 05401

Hybrid Water Heater Rebate

A Partnership between FW Webb - GE - Efficiency Vermont

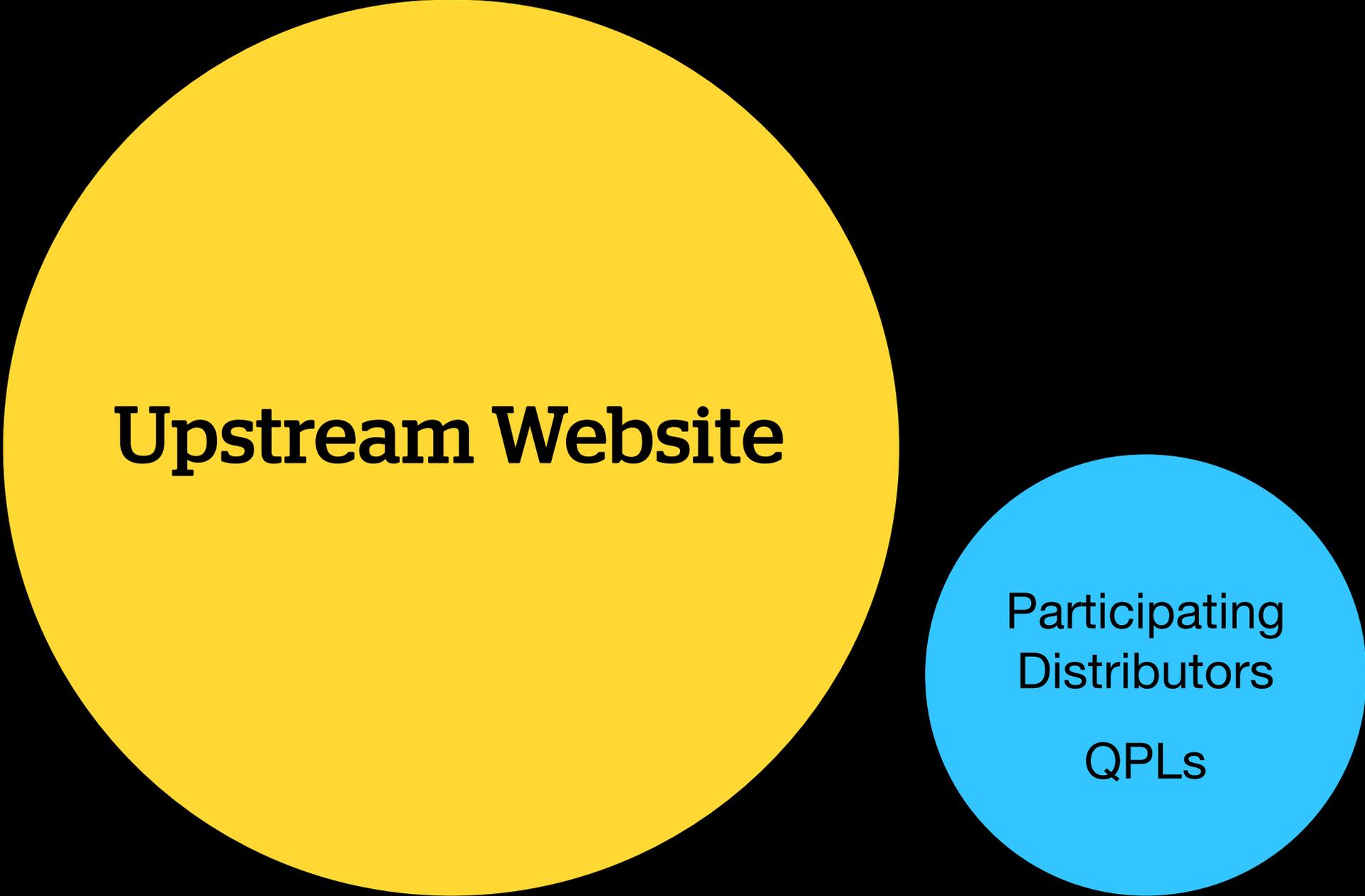
In order to get Efficiency Vermont's \$550 instant-off rebate at FW Webb for the purchase of a GE Geospring™ Hybrid Water Heater, you will need to come to Webb with some basic information about the location where the equipment will be installed. Use the following checklist to ensure a smooth purchase.

Required Information:

- **Purchase Type**
 - New?
 - Replacement?
- **Replacing Natural Gas Water Heater**
 - Yes? — **NOT ELIGIBLE**
 - No?
- **Replacing Electric Water Heater**
 - Yes
 - No
- **Bill To/Purchaser Info**
 - Company or Purchaser Name
 - Address
 - Phone
- **Install Location**
 - Address
- **Install Type**
 - Residential?
 - Commercial?

Requested Information:

- **Install Location**
 - Customer name
 - Phone Number
 - Number of bedrooms (if residential)
 - Primary space heat fuel type (Electric, LP, Oil/Kero, Wood/Biomass, or Other)?



Upstream Website

Participating
Distributors

QPLs

Logos & hyperlinks

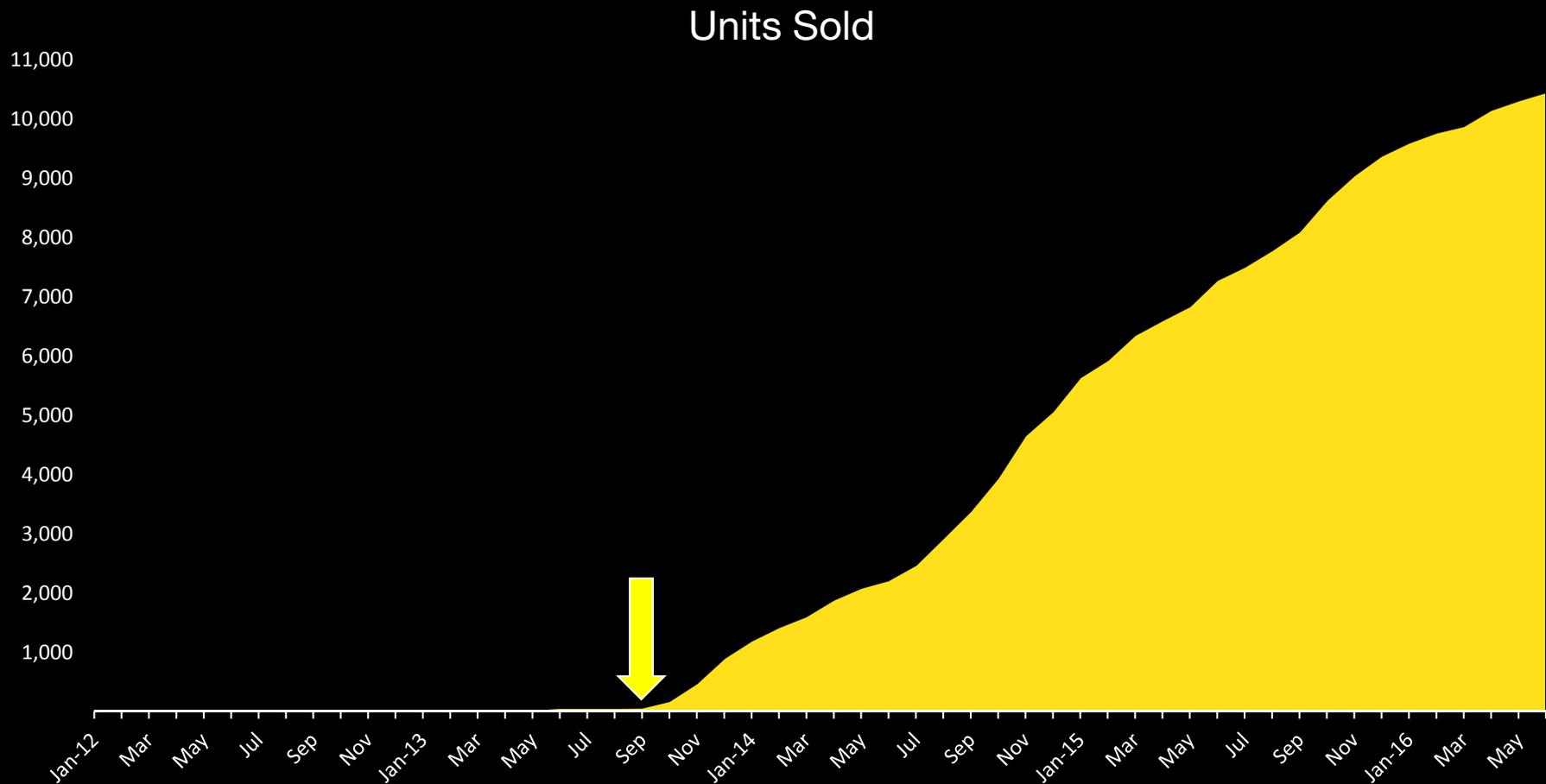
High Performance Circulator Pumps
 Qualifying Products (Sorted by Manufacturer)
 Effective 7/1/2014; Updated 4/27/2016



Manufacturer	Model Number	Description	Max Input (watts)	Product Incentive
AquaMotion	AM55-FVL	Einstein Series	38	\$50
	AM55-SFVL	Einstein Series	38	\$50
Armstrong	Compass	Compass Circulator	45	\$50
	0306-001.0	4300/4380/4312/4392 Design Envelope Pump	800	\$600
	0406-001.0	4302/4382 Design Envelope Pump	800	\$600
	0308-002.0	4300/4380/4312/4392 Design Envelope Pump	1518	\$600
	0408-002.0	4302/4382 Design Envelope Pump	1518	\$600
	0308-003.0	4300/4380/4312/4392 Design Envelope Pump	2136	\$600
	0408-003.0	4302/4382 Design Envelope Pump	2136	\$600
Bell & Gossett	6050B2000	Ecocirc Auto	60	\$50
	6050B2001	Ecocirc Vario	60	\$50
	104303	Ecocirc XL 15-75	200	\$200
	104304	Ecocirc XL 15-75	200	\$200
	104308	Ecocirc XL 20-140	500	\$200
	59096032	ALPHA 15-55F/LC	45	\$50
	59096033	ALPHA 15-55FR/LC	45	\$50
	59096034	ALPHA 15-55SF/LC Stainless	45	\$50
	59096077	ALPHA 15-55F	45	\$50
	59096078	ALPHA 15-55FR	45	\$50
	59096079	ALPHA 15-55SF Stainless	45	\$50
	96520922	ALPHA 15-55FC - EVT	45	\$50
	96546569	ALPHA 15-55FRC - EVT	45	\$50
	96126022	MAGNA3 32-60 SS 115/230v	85	\$50
	96071395	MAGNA CLSC 32-60 CI 230v	85	\$50
	96126020	MAGNA3 32-60 CI 115/230v	85	\$50
	96126019	MAGNA1 32-60 CI 115/230v	107	\$50
	96126021	MAGNA1 32-60 SS 115/230v	107	\$50
	96126023	MAGNA1 32-100 CI 115/230v	178	\$200
96126025	MAGNA1 32-100 SS 115/230v	178	\$200	

HVACR Upstream Results

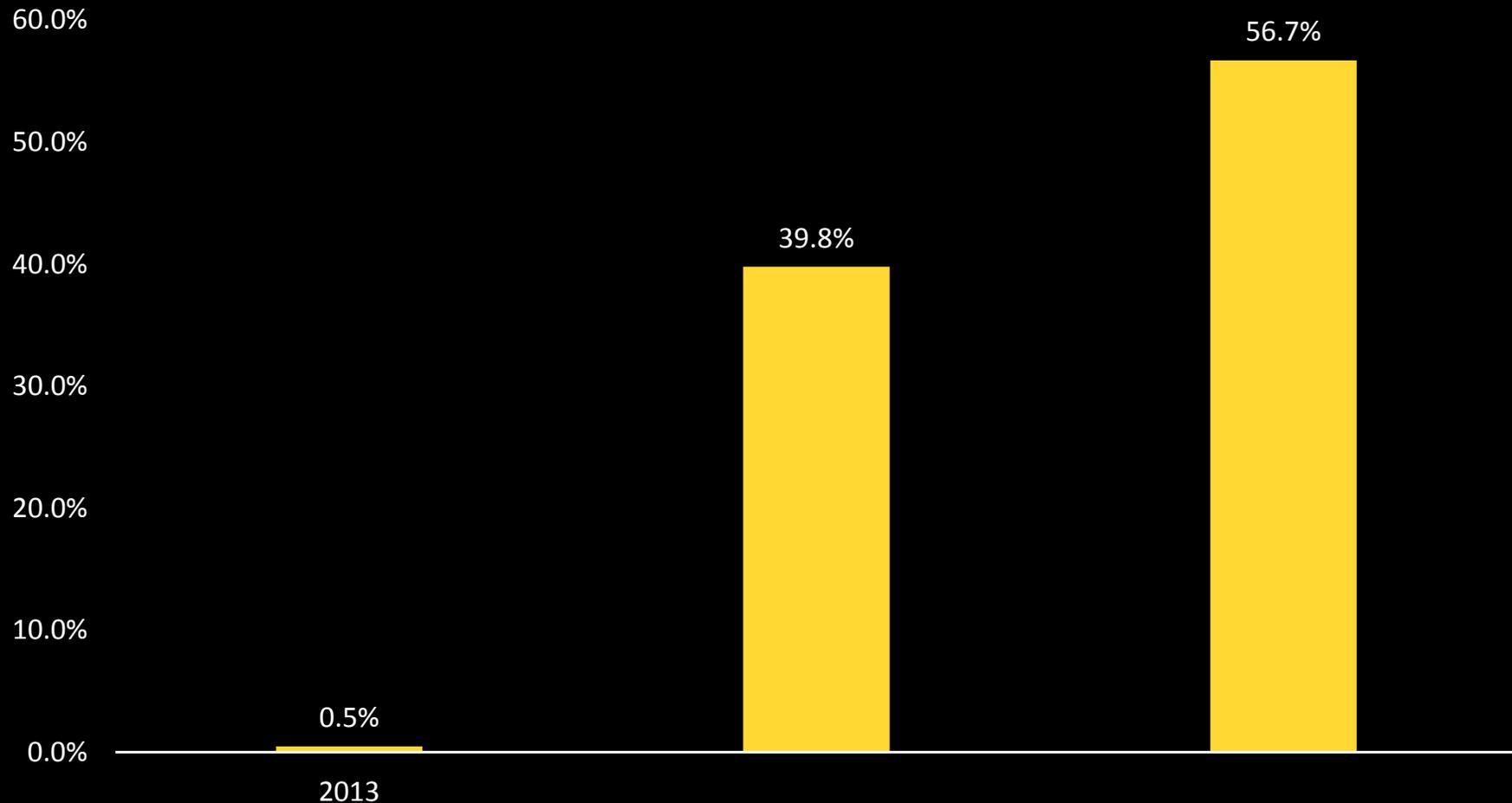
Consolidated Results from Participating Vermont Distributors of High-Performance Circulator Pumps



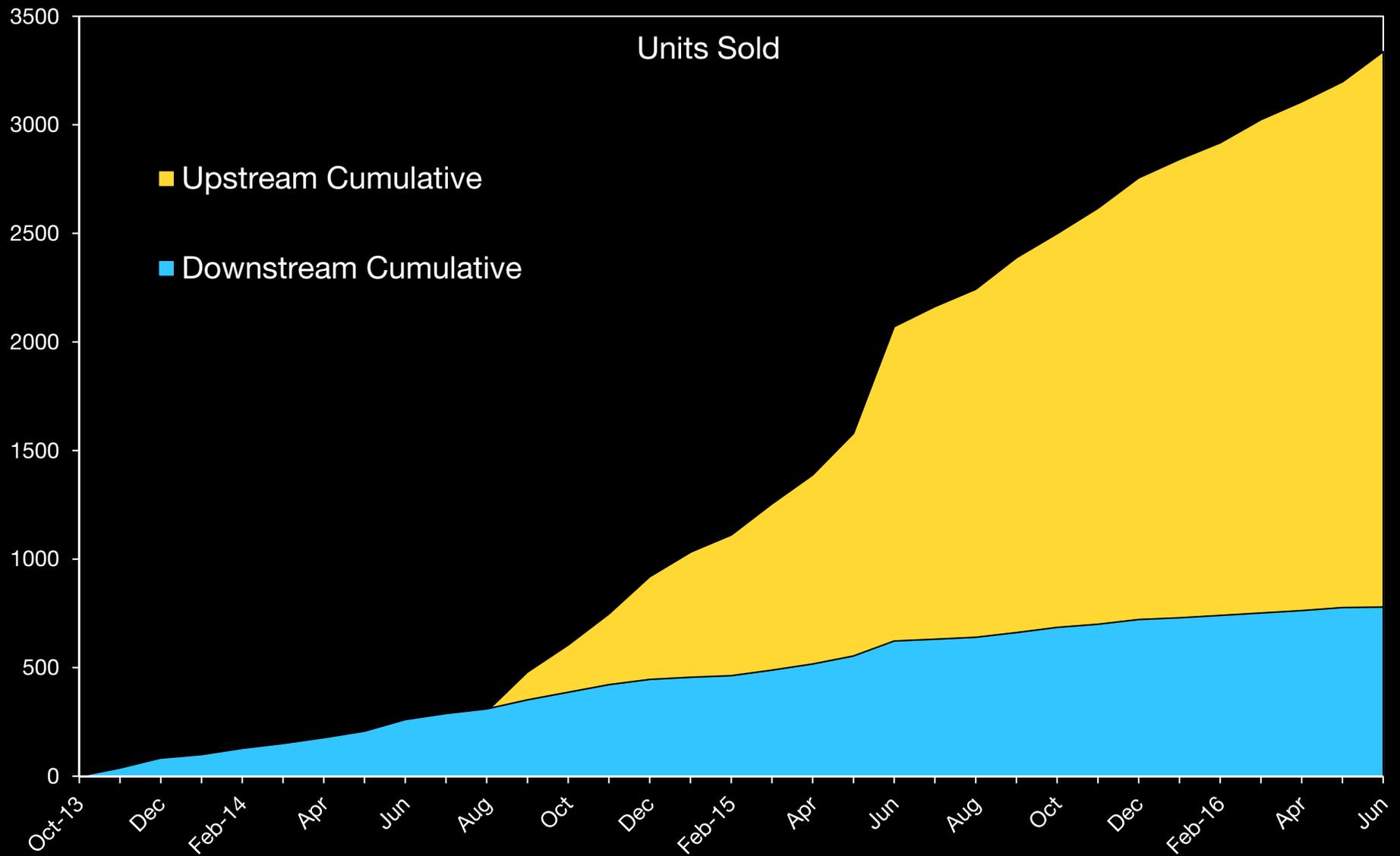
➔ *Every 2.5 Days = TOTAL ANNUAL AVERAGE before Upstream Program!!*

Distributor's "Before & After" Upstream

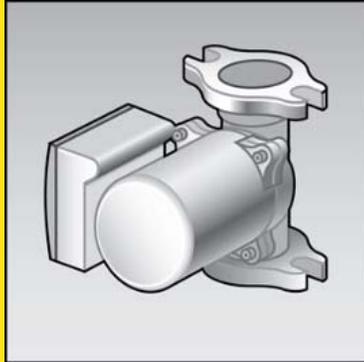
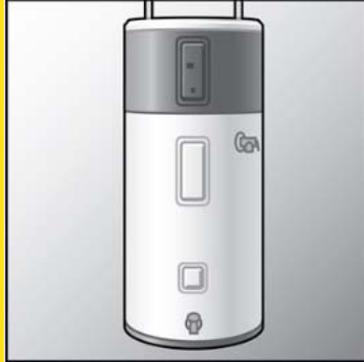
HPCP as a % of CP Sales



Upstream vs. Downstream; Heat Pump Water Heaters



Impact of the Upstream Program in 2015

	HPCP	HPWH	CCHP
			
Increase in Sales	8,550%	750%	45%

- 1) Business model**
- 2) Front loaded**
- 3) Strategic partnerships**
- 4) Supply chain management**

Thank you!

**Howard C. Merson
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Strategic Planning Manager, HVACR**

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QUESTIONS?