

Fullstream ahead: A multilevel approach to energy-efficiency program design

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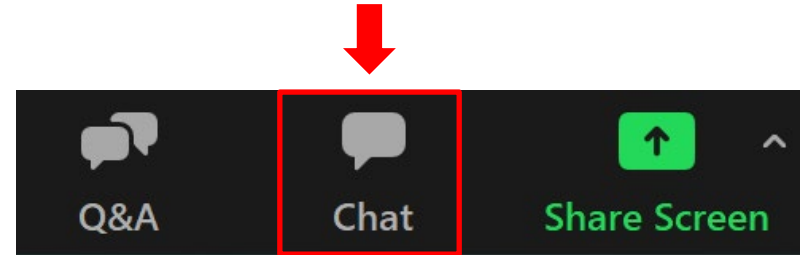


This is a roundtable discussion

- Participation is highly encouraged
- Please speak up if you have a comment or questions
- Use the Zoom chat to post questions and comments
- Video is encouraged

Logistics for our discussion

- Select Chat on the bottom toolbar
- Enter your question for Vince, Jake, or the discussion group
- We'll queue up your questions and work through as many as we can



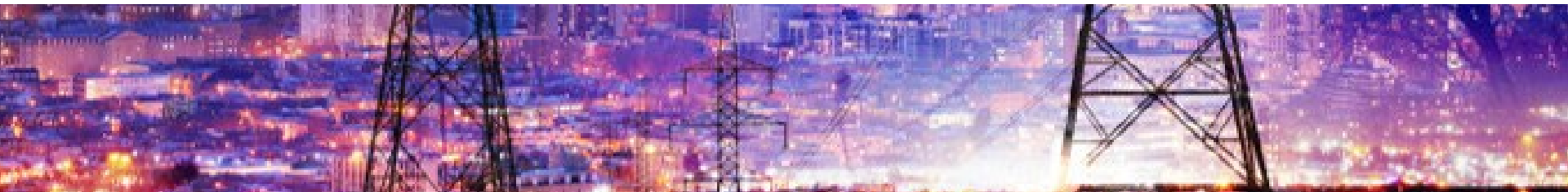
Trends in midstream and upstream programs

- Utilities are increasingly using midstream programs to drive traditional efficiency and electrification measures—particularly heat pumps and heat pump water heaters
 - [What are some examples of midstream and upstream electrification programs?](#)
- Traditional evaluation methods and poor data collection prevents utilities from claiming all the savings from these programs
 - [Collecting accurate and complete data in midstream programs](#)
- Utilities are struggling to engage with and build trade ally networks of contractors and distributors trained to install electrification technologies
 - [Boosting the adoption of efficient electric heating technologies through trade ally engagement](#)





What's your experience with midstream and upstream programs?



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The Future of DSM



Erosion of lighting opportunities



Evolving Program KPI's

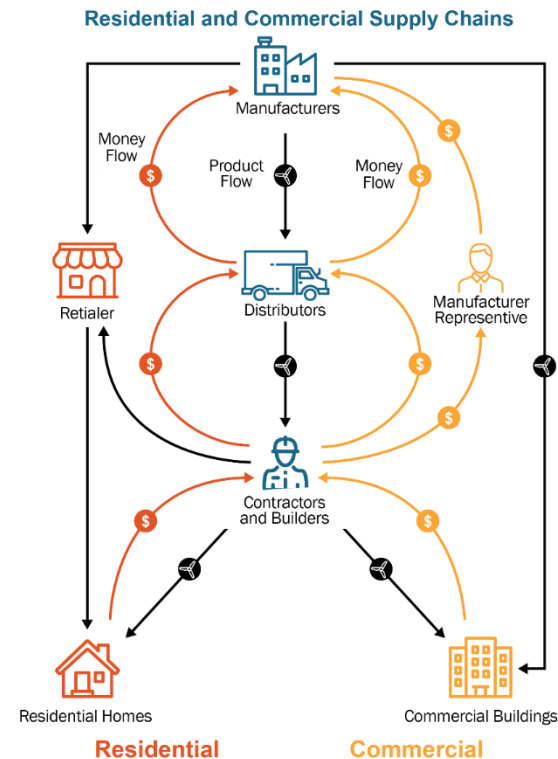
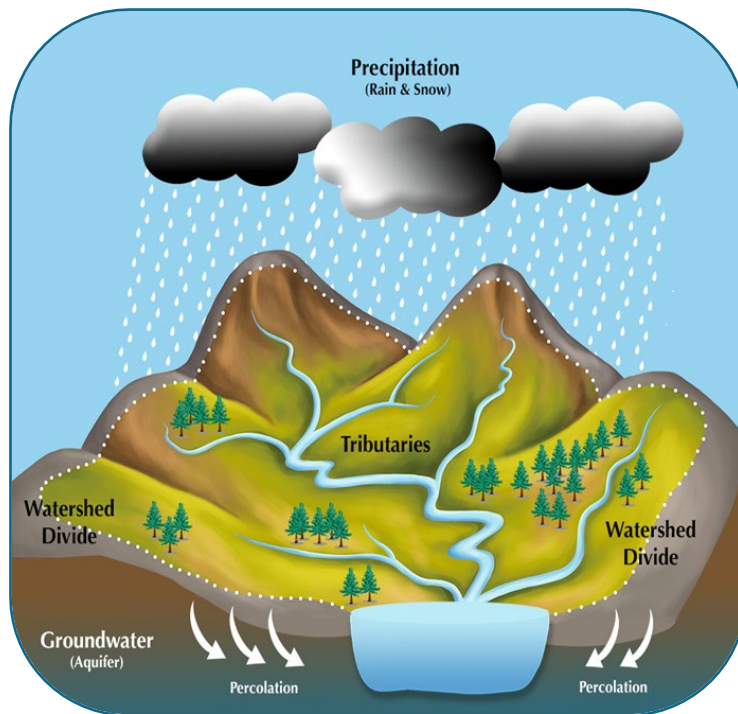


Market Complexity



BUT... we must still meet targets

The Complexity of a Stream



Fullstream Plan For the Future



Allow multiple market actors to participate

Influence/capture missed opportunities

Optimize incentive setting and distributor purchasing

Consistent Attribution throughout Supply Chain

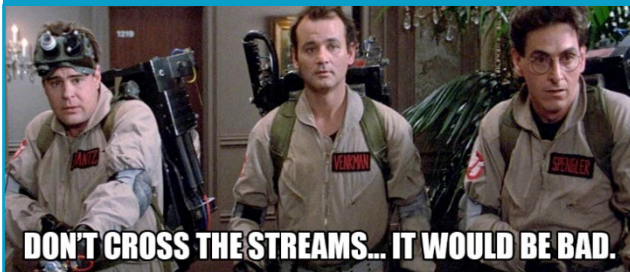
Market sales saturation baseline and adoption curve



The Fullstream approach optimizes the utilities influence over the measure journey to the customer. It leverages the strengths of multiple market actors to overcome the barriers unique to the market.

Crossing the Streams

Traditional Programs



- No multiple participation points to reduce “double-dipping”
- Ask more from a single market actor to attempt having a balanced outcome

“We’ll cross the streams”







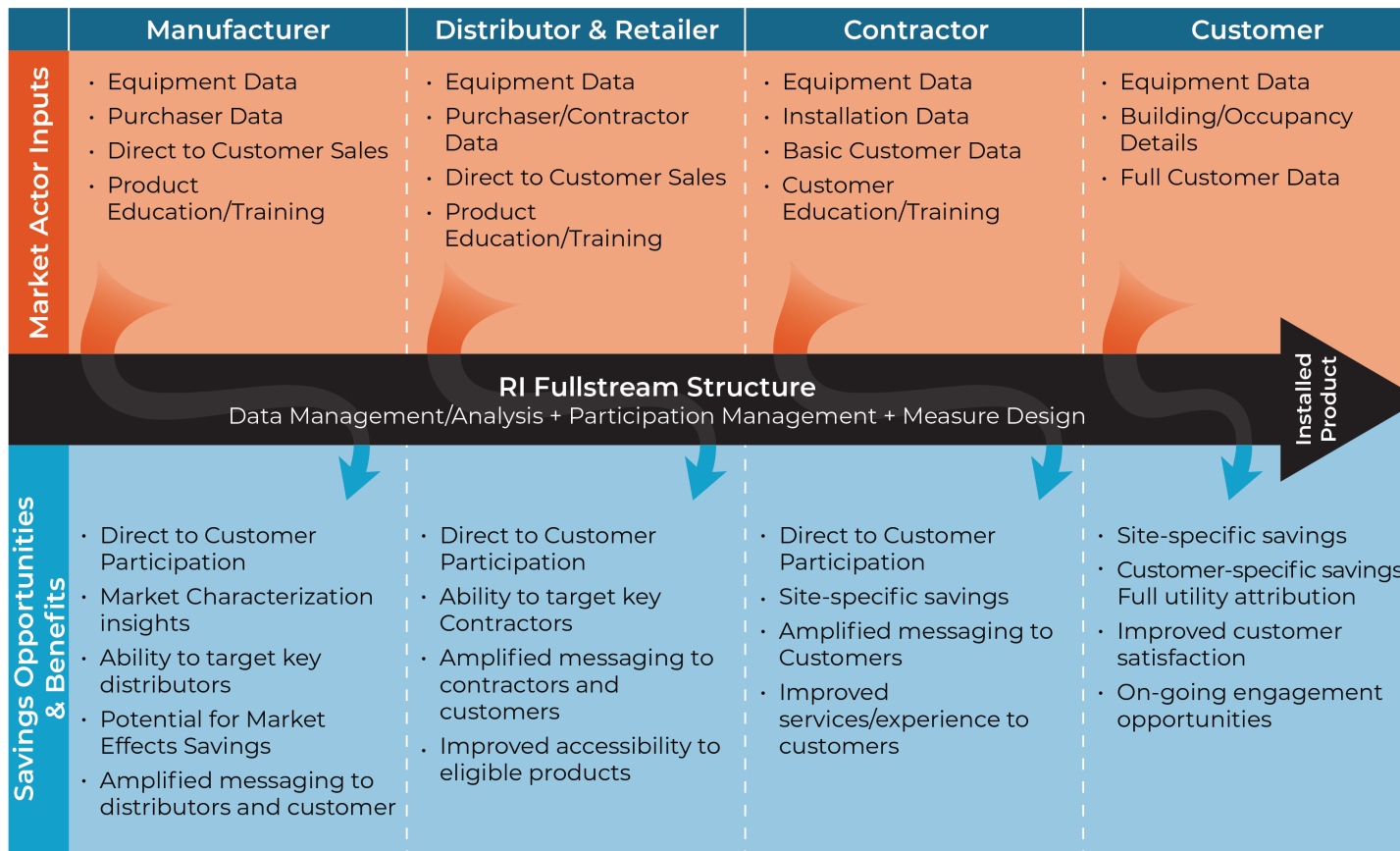
- Multiple participation points to optimize market transformation, manage risk through measure design
- Ask only for what market actors are best at, but ask from more market actors



I love this plan! I'm excited to be a part of it!

Fullstream – Matching Market Actor Capabilities with Participation Requirements

	Participation Type	Data Collected	Participation Point	Value Proposition
 Manufacturer	<ul style="list-style-type: none"> • Education / Training • Better Terms for Distributor • Provide Sales Data 	<ul style="list-style-type: none"> • Equipment Data • Purchaser Data • Occasional Customer Data 	Upstream Interaction	<ul style="list-style-type: none"> • Increase Sales
 Distributor/ Retailer	<ul style="list-style-type: none"> • Stocking • Training • POS Discount / Drive Downstream Application 	<ul style="list-style-type: none"> • Contractor Data • Equipment Data • Limited Customer/Purchaser Data 	Midstream Interaction	<ul style="list-style-type: none"> • Increase Sales • Training
 Contractor	<ul style="list-style-type: none"> • Training • Expanded Customer Touch / Participation / Data • Financing 	<ul style="list-style-type: none"> • Basic Customer Data • Installation Data • Equipment Data 	Trade Ally Interaction	<ul style="list-style-type: none"> • Increase Sales • Training • Leads
 Customer	<ul style="list-style-type: none"> • Self Education • Demand Higher EE • Further Participation / Deeper Dive 	<ul style="list-style-type: none"> • Full Customer Data • Equipment Data • Deeper Dive 	Downstream Interaction	<ul style="list-style-type: none"> • Discount • Check • Reward

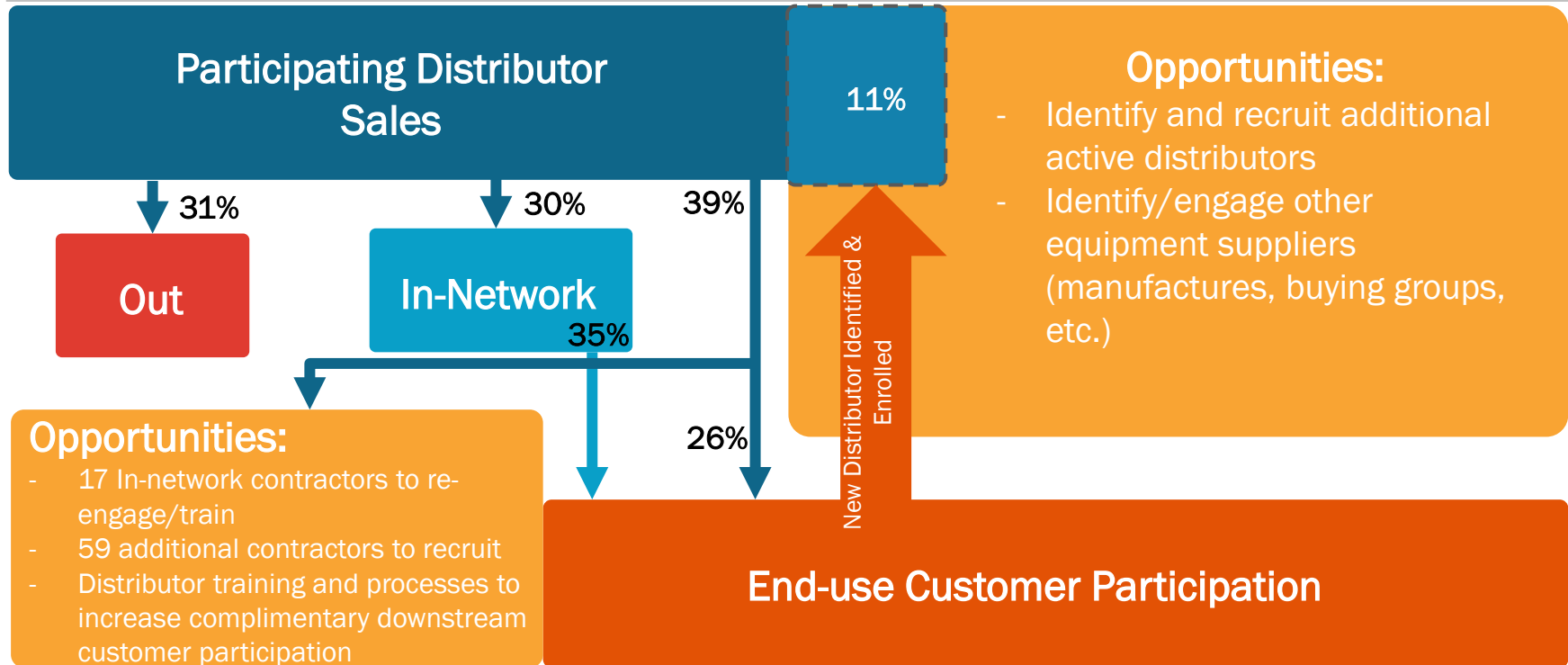


Preliminary Results

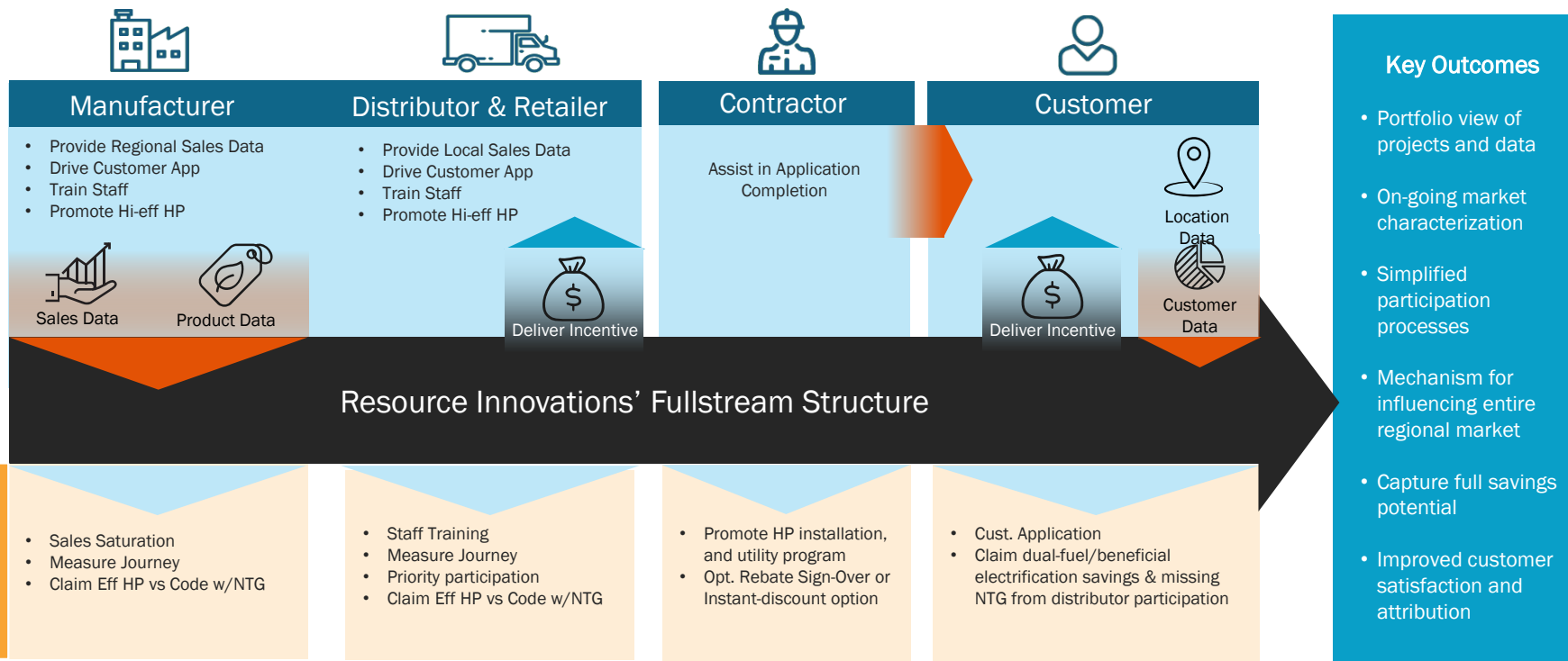
	Q1-2021		Q1-2022	
	Lamp Qty	kWh	Lamp Qty	kWh
Midstream/Distributor	4,616	209,632	16,154	425,012
Downstream achieved (post-purchase + assessment)	4,422	493,816	8,492	294,708
Downstream - pipeline "Active"			3,416	182,157
Total	9,038	703,448	28,062	901,877



Preliminary Opportunities



Fullstream Example for Residential Heat Pumps



Ideal Market Conditions & Target Measures



Target Market Conditions

- New/Latent technologies (EV, heat pumps)
- Un-stable supply chains (chip issues for smart HP water-heaters)
- Multiple barriers to adoption throughout the supply chain
- Customer awareness
- Sales/technician awareness/ability
- Local, regional, national availability
- Disconnection between distribution point and end-user (participation data collection barriers)



Example Measures

- New Rooftop Units
- Gas Boilers
- Heat Pump systems (comm, res, dual-fuel, etc.)
- HP Water Heating
- Controls, DR

Traditional Program compared to Fullstream

	Program	Fullstream
Scale	Program admin's service territory	Program administrator's service territory + manufacturer influence
Target	Generally, a specific end-use customer demographic	All supply chain stakeholders for a given product or service
Goal	Near-term saving	Near-term savings, savings optimization, customer awareness, on-going adaptations
Approach	Save energy through customer participation	Increase savings by addressing multiple barriers to adoption throughout the supply chain
Scope of Effort	Results from customer participation	Multiple intervention points and strategies
Participation Process	Eligibility centric – Application enforcement process	Data Centric – Data submissions aligned with market actor capabilities
Needed Structures	TRM/energy calculations, participation process	Data Management/Analysis, participation processes, enhanced measure design
Level of Program Administrator Control	Can control pace, scale, geographic location, identify participants	Project admins can prioritize effort and type of intervention with chosen stakeholder groups
Evaluation and Measurement	Energy use and savings, participants, free-ridership, and sometimes spillover	Energy use and savings, participants, free-ridership, and sometimes spillover
Timeframe for planning, savings measurements, and cost-effectiveness	Annual or multi-year planning and reporting cycles	Real time market feedback for rapid adjustments, annual or multi-year planning and reporting cycles

THANK YOU!

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Contact us



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Have a question? Ask E Source!

Submit an inquiry:

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More on trade allies

[Boosting the adoption of efficient electric heating technologies through trade ally engagement](#)

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