

PRESENTATION PURPOSE

Objective: Present findings from our Midstream Gas Research, which included a literature review, 4 peer utility interviews, and 2 industry expert interviews.

Audience: The MEEA Midwest Energy Solutions Conference

Process: Literature review and peer utility / utility expert interviews

Structure: This presentation includes the following:

- Research objectives
- Methodology
- Key Findings
- Recommendations

COMMERCIAL MIDSTREAM BENCHMARKING & BEST PRACTICES

February 18, 2021

Presented by Jenna Bagnall-Reilly, TRC





AGENDA

Research Objectives

Methodology

Key Findings

Recommendations



BACKGROUND:

RESEARCH OBJECTIVES & METHODOLOGY





RESEARCH OBJECTIVES

This qualitative research effort sought to:

- ① Understand **barriers to and drivers of further distributor engagement** in the Consumers Energy commercial midstream program for gas equipment.
- ② Identify **opportunities to improve** the Consumers Energy commercial midstream program.
- ③ Develop recommendations for **program design improvements that would increase distributor sales of gas equipment** through the Consumers Energy commercial midstream program.



METHODOLOGY

We took a two-pronged approach to this research effort:



LITERATURE REVIEW 18 SOURCES

- Publicly available midstream program data related to gas measures
- Industry conference proceedings
- Industry group publications
- Industry research groups and sources



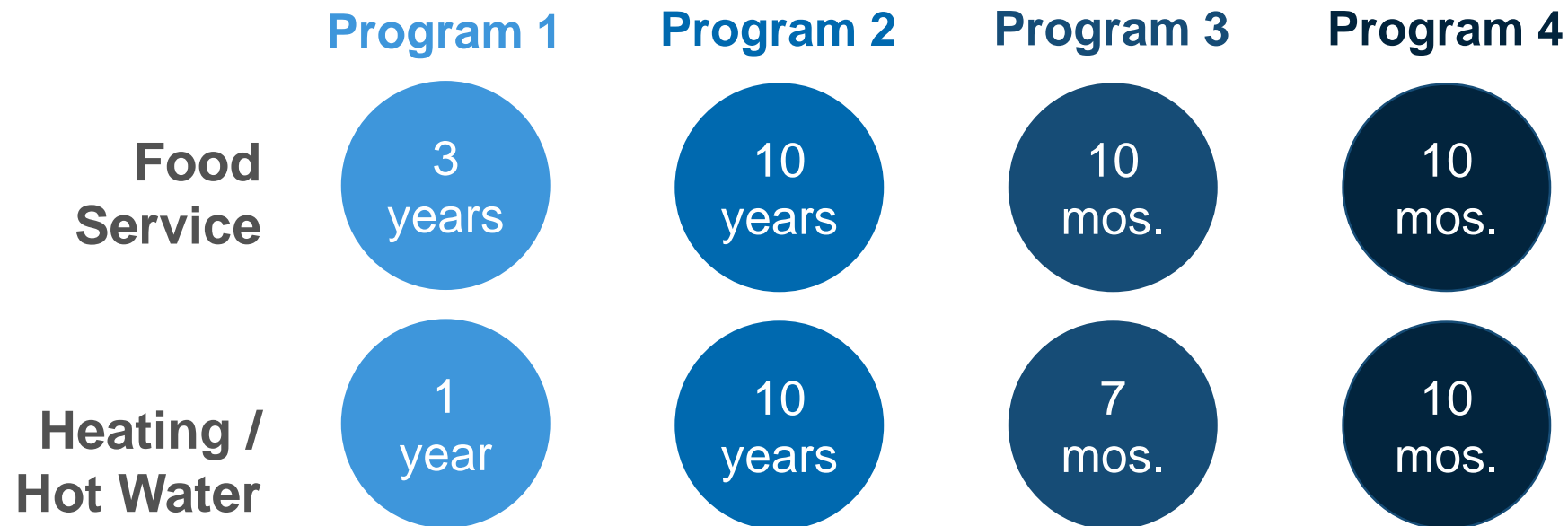
PEER UTILITY AND INDUSTRY EXPERT INTERVIEWS 6 INTERVIEWS

- 4 interviews with peer utility contacts managing commercial midstream programs that offer gas measures
- 2 interviews with industry experts



METHODOLOGY: RESPONDENT PROFILES

We interviewed respondents representing four utilities' gas midstream offerings. **The age of their C&I gas midstream programs are summarized below:**



This summary is specific to programs' gas midstream offerings. They may also have electric offerings.



WHAT WE HEARD:




KEY FINDINGS & RECOMMENDATIONS




PROGRAM SAVINGS

So far, midstream gas programs are not accounting for a large share of peer utilities' total C&I savings. The percentages hovered around 5 to 15% of the total savings, although program managers indicated that the share is increasing.

→ Midstream model may not be as cost-effective as downstream for gas HVAC and Food Service measures.

 *[We have] accepted that it is going to cost more to hit that market, for HVAC we are trying to go after measures with little to no activity in the downstream program.* 


 **Recommendation:** Set realistic goals for the future expansion of midstream program sales. Determine process for moving measures to midstream.



MIDSTREAM STRATEGY

It does not appear to be necessary to eliminate downstream incentives when measures are offered through a midstream program. Respondents noted ways to confirm double-counting was not taking place.






Recommendation: Outline a strategy for selecting midstream measures: there could be similar measures in both downstream and midstream.

- Consider *who* may be purchasing a given equipment when selecting measures.
- When moving measures to midstream, consider offering them in both programs for an amount of time to test where they are most successful
- Midstream program managers did not report significant pushback from contractors when products were also offered with downstream incentives



COORDINATION WITH RESIDENTIAL PROGRAMS

As the table below shows, there is little coordination with residential programs. One respondent noted this has caused confusion for distributors.


<u>UTILITY</u>	<u>COORDINATION WITH RESIDENTIAL</u>
Program 1	 No; Comparable residential programs are not getting traction
Program 2	 Residential programs retired in 2019; did not market together
Program 3	 Little coordination, though some distributors participate in both
Program 4	N/A No residential midstream program



COORDINATION WITH RESIDENTIAL PROGRAMS

Residential and commercial midstream programs seem to be operated independently, even if distributors have equipment for both marketplaces.

- Within distributors serving both markets, program staff try to identify and educate appropriate points of contact about each program.
- Without coordination, established residential midstream programs can hamper introduction of commercial midstream and vice versa.

 **Recommendation:** When possible, coordinate with residential efforts to avoid confusion amongst distributors.



UTILITY COLLABORATION

Several respondents and/or literature review sources noted that coordinating with other utilities in a region helped to streamline the process for participants.

- For example, a Midwestern utility collaborates with another Midwestern utility; Puget Sound Energy collaborates with seven utilities
- In addition to standardized efficiency criteria and rebates, a relatively consistent distributor enrollment agreement across utilities would help




Recommendation: Work with other utilities in the region to offer a consistent program for distributors that serve multiple utility service areas.



MARKET SUPPLY CHAIN

Establishing a network of manufacturer representatives and contractors that sell and install high efficiency equipment can help utilities understand the market supply chains needed for midstream program design.

- Respondents reported that developing relationships with manufacturer representatives and contractors has been effective to engage with distributors.
- The literature review also indicated that incorporating the entire supply chain into the utility program strategy caused significant increases in efficient products sales.

 **Recommendation:** Conduct research into market supply chain, target audience, and sales cycle for specific measures.



10-STEP APPROACH CITED BY VERMONT ENERGY INVESTMENT CORPORATION (VEIC)

- 1 Draw up a detailed program plan.
- 2 Determine the value proposition for supply channel partners.
- 3 Map the supply channel from start to finish.
- 4 Decide on equipment eligibility and performance requirements.
- 5 Design protocols for optimal data collection at the supply channel level.
- 6 Conduct planning sessions with supply channel partners.
- 7 Invite the supply channel to collaborate on a sales, marketing, inventory, and training plan.
- 8 Establish program incentives and fees that are responsive to supply channel feedback.
- 9 Send memorandum of understanding (MOU) to strategic partners.
- 10 Draft evaluation, measurement, and verification (EM&V) plans.



SUCCESSFUL MEASURES

All respondents stated they had more activity through Heating and/or Hot Water offerings in 2020, as Food Service has been impacted by the COVID-19 pandemic. The most successful measures were:



HEATING/HOT WATER

- Condensing boiler
- Water and steam process boilers
- Storage water heater

“ HVAC growth of midstream came at same time as condensing boiler (where nothing was happening downstream). ”



UNDER-PERFORMING MEASURES

There were mixed responses about under-performing measures.



FOOD SERVICE

- Gas fryers*
- Dishwashers



HVAC

- Steam traps
- Indirect water heaters

“ *Not hot – is gas fryers, that one we are testing to boost the incentive for end of the year. People are buying the non-qualifying [option]. We think that we are not covering enough of the cost.* ”

* One program reported fryers as an underperforming measure; gas fryers were a successful measure for other programs.



KEY BARRIERS

Distributors experience an administrative and financial burden when participating in a gas midstream program. Several sources noted incentives paid to the distributor should cover the administrative and carrying costs.

- Utilities indicated different models to address the financial burden.
- To address administrative burden, utilities worked with their Implementation Contractor (IC) to make the process of verifying customer information as easy (and quick) as possible.

 **Recommendation:** Consider ways to overcome the administrative burden and incentivize distributors to participate. Work with IC to support distributors and streamline verification of customer eligibility.

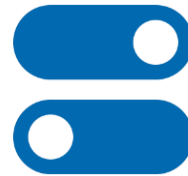


ENGAGEMENT STRATEGIES

Respondents employ a few strategies to engage and incentivize distributors:



SPIFF BONUS
(n=3)



**DISTRIBUTOR
CHOOSES HOW
TO SPEND
INCENTIVE**
(n=2)



**SALES
COMPETITIO
N**
(n=1)

Note: SPIFFs are rewards based on the volume of sales.



thank you

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WHAT WE REFERENCED:
RESOURCES



RESOURCE CITATIONS

- *Massachusetts Commercial and Industrial Upstream HVAC/Heat Pump and Hot Water NTG and Market Effects Indicator Study*, Mass Electric and Gas Program Administrators (2018) [Link](#)
- *Driving Upstream Markets through Strategic Partnerships and Excellence in Supply Chain Management*, ACEEE Summer Study (2016) [Link](#)
- *Five Years and Beyond with Supply Chain Engagement: What's Next with Upstream and Midstream?*, ACEEE (2018) [Link](#)
- *Distributor-Focused Midstream Programs: The Key to Unlocking Residential Water Heater and HVAC Savings*, Energy Star (2018) [Link](#)
- *Midstream Success Stories*, Presentation by Tianna Byrtus, Puget Sound Energy [Link](#)
- *2020 Update to the Triennial Plan 2018-2020*, Efficiency Vermont (November 1, 2019) [Link](#)



RESOURCE CITATIONS

- *Launching and Growing a Midstream Program: Facilitating Additional Efficiency Opportunities*, DNV-GL (February 12, 2015) [Link](#)
- Commercial Midstream Energy Efficiency Incentive Programs, Argonne National Laboratory (November 2017) [Link](#)
- Upstream HVAC Initiative Process Evaluation, Mass Program Administrators and Energy Efficiency Advisory Council (October 2017) [Link](#)
- *Energy Waste Reduction 2019 Annual Report*, DTE (2019) [Link](#)
- Southern California Gas Company (U 904 G) Energy Efficiency Programs 2017 Annual Report, SoCalGas (May 1, 2018) [Link](#)
- *PSE 2019 Annual Conservation Plan*, Puget Sound Energy (2018)
- *ComEd Midstream Incentives Program Evaluation Report*, Navigant (November 23, 2016) [Link](#)



RESOURCE CITATIONS

- *Swimming to Midstream: New Residential HVAC Program Models and Tools*, ACEEE (2016) [Link](#)
- *Influencing Smaller Markets: Can Residential Midstream and Upstream Incentive Models Succeed?*, ACEEE (2016) [Link](#)
- *Upstream Program Designs for Different DSM Measures: How to Improve Your Midstream and Upstream Programs*, E Source (August 20, 2019) [Link](#)
- *Swimming Upstream: When DSM Programs Can Benefit from Upstream Incentives*, E Source (2015) [Link](#)
- *San Diego Gas & Electric Company (U 902 M) Energy Efficiency Programs Annual Report 2018 Results*, SDG&E (May 1, 2019) [Link](#)