

The Great Migration: Moving Energy Efficiency Programs to Midstream

IEPEC 2019

Presenter: Rohit Vaidya

Authors: Rohit Vaidya, Jared Powell, Sam Manning, NMR Group

Ann Clarke, National Grid

James Fay, Commonwealth Edison

August 21, 2019





NMR Group, Inc.

Introduction

National Grid New York

- Natural gas heating and water heating market
- Savings opportunities
- Market actor roles

Commonwealth Edison

- Moving programs upstream
- Opportunities and challenges
- Lessons learned



Upstate New York Natural Gas Heating and Water Heating Market

Objectives

- Estimate sales of boilers, furnaces, and water heaters
- Understand stocking practices
- Investigate influence of key market actors

Methodology

- Survey of supply houses in Upstate New York
- Survey of contractors in Upstate New York





Supply House Sales of Natural Gas Heating and Water Heating Equipment in Upstate New York

- The greatest opportunity for a midstream program intervention was in the residential sector
- Residential units represented the largest share of supply house sales



Supply House Sales by Equipment Efficiency



Efficiency Levels of Equipment Sold by Supply Houses

- Water heating equipment offered the largest savings opportunities
- Furnaces and boilers also offered untapped opportunities



Can a Midstream Program Capture More Savings?



- The influence of the existing National Grid program is percolating up to distributors from the downstream incentives
 - About one-fifth of supply houses said they would stock less high-efficiency equipment without the existing downstream program
 - Four out of five of these supply houses indicated that the downstream program has influenced stocking of high-efficiency equipment
- Program influence on supply house stocking is likely to increase with a midstream intervention
 - Direct engagement with supply houses would deepen impact by motivating increased stocking of high-efficiency equipment

Supply Houses are a Key Source of Energy Efficiency Information



Types of Advice Given to Contractors by Supply Houses (n=23)

Information on equipment sizing	96%
Information on equipment energy efficiency	87%
Information on equipment installation	83%
Information on different brands	78%
Other	9%
	9% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



Supply house reported influence on contractors of equipment energy efficiency advice (n=23)

Contractor reported influence of supplier recommendations on energy efficient equipment purchases (n=41)

Somewhat Influential



Conclusions



A midstream intervention could cast a broader net over the natural gas heating and water heating market.

- Deepen the influence on supply house stocking practices
- Leverage supply house relationships with contractors





Literature Review of Midstream Programs

Objectives

- Benefits and challenges of moving HVAC programs to a midstream intervention
- Lessons learned from implementing midstream programs

Methodology

• Review of 16 HVAC programs in over 11 states

Key Findings





Midstream HVAC programs can operate successfully in the residential or C&I sectors

 C&I programs tend to focus on small and medium, rather than large commercial systems



Programs that have shifted to midstream can increase savings and drive the market toward higher efficiency HVAC equipment

 By working through distributors, programs can reduce participation barriers and boost participation rates

Opportunities and Challenges







Program Design

- Conduct sufficient market intelligence
- Choose the best equipment to shift upstream
- Set the proper incentive structure and amount

Rohit Vaidya

rvaidya@nmrgroupinc.com617-284-6230 ext. 14

Group, Inc.

all the fill the of the