

2.3.4 Conclusion: Summary of HVAC Contractor Insights

The HVAC contractor has many unique advantages for expanding into the residential energy efficiency market. The summary below details important observations on HVAC contractors and those observations' impacts on potential expansion into the residential energy efficiency market. Understanding these impacts can help HVAC contractors, program administrators, and other actors create and/or sustain a business that promotes energy efficiency.

Summary of HVAC Insights		
	Observations	Impact on Potential Expansion into Residential Energy Efficiency Market
Market	<ul style="list-style-type: none"> Most businesses in the HVAC contractor market are small, earning less than \$1 million in revenue per year. The HVAC industry is seasonal and regional in nature. Approximately 20 percent of HVAC contractors fail across the industry every year, with 70 percent of new HVAC businesses failing in their first year of operation. 	<ul style="list-style-type: none"> Smaller HVAC contractors with annual revenue below \$1 million typically would not consider expanding into home energy upgrade services. Medium-sized contractors with an already established HVAC business are prime candidates for an expansion into the residential energy efficiency market. They have the assets already in place to expand and a solid body of established service contracts in hand to drive sales.
Governance	<ul style="list-style-type: none"> Most HVAC contractors are sole proprietorships or family-run businesses. HVAC contractors typically have a lean governance structure that is centered on the owner or a few key players. 	<ul style="list-style-type: none"> The owner has limited time to evaluate expansion opportunities for the residential energy efficiency market and may require assistance in that area. Lean governance provides HVAC contractors with the flexibility to make decisions quickly.
Financial Model or Structure	<ul style="list-style-type: none"> The HVAC business is seasonal: most HVAC repair and replacement jobs occur during the seasons when occupants are least comfortable with their climate. HVAC contractors are generally funded through personal finance and often rely on lines of credit to cover their cash shortfalls during off seasons. Successful HVAC contractors typically aim for about a 12 percent net margin for profitability. An HVAC contractor's gross profit is higher for equipment (approximately 45 percent on average) than for labor.²⁴ It is generally in the HVAC contractor's best interest to limit the amount of labor hours on a job in order to keep average margin up. 	<ul style="list-style-type: none"> Personal credit cards carry a high cost of debt and high risk. A high cost of start-up debt lowers profitability of smaller firms. The seasonal nature of the HVAC business provides an opportunity for expansion into the residential energy efficiency market. Such a shift gives HVAC contractors a chance to bring in revenue year-round, as home energy upgrade demand is not seasonal in nature. The slow season is the best time for programs to collaborate with HVAC contractors to provide training and incentives because contractors have time to take advantage of program offerings. HVAC contractors can maintain desired levels of profitability even after shifting to a more labor-driven model by focusing on home energy upgrade sales during their slow season. To avoid shifting too far toward a labor-driven model, HVAC contractors can subcontract more labor-intensive components of home energy upgrade services to specialists such as insulation contractors.
Assets and Infrastructure	<ul style="list-style-type: none"> HVAC asset requirements are broadly similar to those of a home performance contractor. HVAC contractors tend to lease their equipment, reducing the need to invest a significant amount of capital in assets up front. The largest investment necessary for an HVAC contractor to expand into the residential energy efficiency market is training for existing staff in home energy upgrade concepts. 	<ul style="list-style-type: none"> Limited assets are required to expand services from HVAC into home energy upgrade services. The marginal investment needed to enter the residential energy efficiency market is approximately \$45,000, and typically lower for an HVAC contractor than a remodeler. HVAC contractors can leverage existing HVAC manufacturer training to mitigate some of the cost of technical training.

²⁴ Gross profit is revenues minus cost of goods sold.

Summary of HVAC Insights

	Observations	Impact on Potential Expansion into Residential Energy Efficiency Market
	<ul style="list-style-type: none"> ■ Dedicating a line of business to home energy upgrades requires HVAC contractors to hire specialized staff, purchase additional equipment, and develop marketing materials. 	<ul style="list-style-type: none"> ■ Labor-intensive components of home energy upgrade work (such as insulation and air sealing) can be subcontracted out to home performance contractors during the initial phase of expansion.
Service Offering	<ul style="list-style-type: none"> ■ HVAC contractors provide specialized services that focus on heating and cooling equipment installation, such as central air conditioning units, furnaces, and hot water heaters. ■ The HVAC contractor’s key revenue driver is repeat business from maintenance contracts. Roughly 500 service contracts is a reasonable threshold for an HVAC business to be sustainable. ■ As part of their core business, HVAC contractors may also provide high-efficiency equipment and thermostat installations. 	<ul style="list-style-type: none"> ■ Adding labor-intensive home energy upgrade services to a service mix primarily focused on material sales will require a shift in strategic thinking and may require additional sales training (from program administrators or manufacturers). ■ Because service contracts are key sources of revenue for an HVAC contractor and involve regular home visits, they can be leveraged to help drive sales of home energy upgrades as well. ■ An expansion in service offerings can also affect the way HVAC contractors organize their annual schedules—for example, keeping staff employed year-round rather than seasonally.
Customers and Customer Acquisition	<ul style="list-style-type: none"> ■ Direct interaction with customers through repeat service visits is the primary means of generating revenue for HVAC contractors. ■ HVAC contractors are considered experts in “home comfort,” health, and safety by consumers because they can moderate air temperatures. 	<ul style="list-style-type: none"> ■ Service contract touch points provide HVAC contractors with an optimal means of providing energy assessment services, helping to drive year-round sales of home energy upgrades. ■ Home comfort, health, and safety give HVAC contractors a natural platform to offer home energy upgrades, because consumers already rely on HVAC contractors to improve their home comfort by repairing HVAC units.