



Case Study:

The Home Energy Detective

MANASSAS, VIRGINIA

The Home Energy Detective assessors include the homeowner in each step of the home checkup. The assessor brings a printer with him so he can hand the homeowners a detailed report at the end of the checkup that includes findings, recommendations, and costs.

CONTRACTOR PROFILE

Contractor:

The Home Energy Detective
(703)-999-2590
www.homeenergydetective.com

Location: Manassas, VA.

Serving Fredericksburg, Stafford, Culpepper and other communities in the Virginia, Maryland, and DC area

Company Founded: 2007**Employees:** 3**Certifications of Staff:**

3 BPI, 2 RESNET, 1 Green Certified Remodeler, Comfort Institute member, EGIA member

Company sees annualized revenue grow by 50% per year since 2007

The Home Energy Detective entered the home performance market in 2007 as a new business focusing on energy consulting. The company has succeeded in growing its business with little assistance from local programs and no reliance on a well-established company or brand name. Since 2007, the The Home Energy Detective has seen revenues grow from \$100,000 to \$500,800 and total number of projects per year rise from 13 to 79.

The Home Energy Detective is a small company that operates out of Manassas, Virginia, and services surrounding regions in northern Virginia. In-house services provided by The Home Energy Detective include the initial energy checkups of the home, test-out procedures, and general contracting. Over 90% of the upgrades it recommends are subcontracted out to its contractor network. This allows The Home Energy Detective to focus on analysis of the home and providing consulting services to meet the needs of the customer. Educating homeowners on the importance of energy efficiency is a primary focus of The Home Energy Detective; “If we can educate homeowners properly, then this industry will flourish. Without education, this industry isn’t going to go anywhere—we are selling information, not windows,” said Troy Tanner, owner of The Home Energy Detective.

As a general contractor, The Home Energy Detective uses its industry contacts to subcontract out individual home energy upgrade projects. Tanner researches every contractor he hires and inspects each completed



The Home Energy Detective's vans serve as mobile billboards for the company. Other advertising strategies include newspaper and radio ads, ads on buses, door hangers, trade shows, and website optimization.

“Video testimonials are the most powerful marketing tool for me right now.”

Troy Tanner, Owner,
The Home Energy Detective

Home Performance Services:

- Energy Checkup
- Test-out
- General Contracting

job for quality. The strict quality assurance policy is stipulated in the contracts The Home Energy Detective sets up with subcontractors, and payments are held until The Home Energy Detective ensures its quality standards are met.

Business Metrics

For most houses, \$395 is charged for the initial home energy checkup. For homes over 4,000 ft², the price increases based on the total square footage of the house. Tanner believes in the importance of accurately valuing home energy checkups. He asks, “What are you really going to get out of a \$50 audit?” Employee compensation for conducting assessments is either \$150 or 38% of each checkup, whichever is the higher amount. Additionally, assessors who close deals for upgrades receive 10% of the gross sales total. Closing rates are typically 40% to 50%.

Tanner is “seriously considering expanding services to include in-house contracting work like insulation, HVAC, and air sealing.” Although overhead would increase, adding these extra services in-house would provide additional revenue opportunities, improve profit margins, and add growth opportunities.

The Home Energy Detective has continued to grow despite the current recession. Since 2007, the company has realized a 50% increase in revenues per year from its consulting services. Between 2009 and 2010 alone, revenues jumped 45%, while the number of projects performed that year increased by 144% and revenue per employee jumped by 145% (see Table 1 below).

Table 1. Home Energy Detectives: Company Size and Business Volume by Year

Year	Employees	Average Project Size (\$)	Revenue (\$)	Total Number of Jobs	Revenue per Employee (\$)
2007	1		\$99,950		\$99,950
2008	2	\$13,492	\$194,055	13	\$97,028
2009	5	\$6,533	\$299,638	32	\$59,928
2010	3	\$4,895	\$434,595	78	\$144,865
2011*	3	\$6,339	\$500,801	79	\$166,934

* Data as of December, 2011.
Data Courtesy of Home Energy Detectives.

Public Programs

In Northern Virginia, there are few public programs available to homeowners for energy-efficient home upgrades. The Home Energy Detective was one of the first contractors to participate in the Northern Virginia Home Performance with ENERGY STAR program (HPwES) and the George Washington Regional Commission's Home Energy Loss Prevention (GW-HELP) program. The Home Energy Detective gets about 7% of its project leads from these two programs. Program fees equal about 2% of the job totals, according to Tanner. To date, the Northern Virginia HPwES program has generated approximately 40 leads, resulting in 32 projects. The GW-HELP program has provided only one lead thus far, but the program is still in its infancy.

Neither the HPwES nor the GW-HELP program compensates contractors in Northern Virginia for energy-efficiency upgrades. Instead, the programs offer rebates to homeowners for qualified work that they have performed on their homes by qualified contractors. Both HPwES and GW-HELP advertise their programs and participating contractors on their websites.

Marketing

Leads are primarily generated through independent marketing efforts on the part of The Home Energy Detective. To date, The Home Energy Detective has conducted over 600 home energy checkups with a 40% to 50% closing rate for projects over \$1,500. The Home Energy Detective has purchased advertising on buses, newspaper ads, websites, and radio spots. Tanner notes, "Radio spots have been the most successful in bringing in new work."

In 2009, The Home Energy Detective participated in the Electric and Gas Industries Association's (EGIA) Home Energy Makeover Contest and was chosen as the winner for a home upgraded in Rockville, Maryland. The project was a collaboration between The Home Energy Detective and a variety of local contractors. Energy upgrades included HVAC, insulation, air sealing, duct sealing, and installation of a tankless water heater. Once the project was concluded, EGIA conducted a case study on the project, which was then published online. To see the full story, visit EGIA's website at: www.egia.org/DesktopDefault.aspx?TabID=924

Marketing efforts at The Home Energy Detective are continuously changing. For example, a \$1,500 full-page ad in a regional remodeling magazine initially brought in 20 to 30 calls per month. When interest began to decline, marketing efforts were re-focused on methods that would continue to build brand recognition and generate leads.



The Home Energy Detective started as a sole proprietor in 2007 focused on home energy checkups and test-outs with all upgrade measures contracted out. While the company has grown to three auditors the owner still meets with each customer personally.

Figure 1. Home Energy Detectives: Distribution of Home Performance Upgrade Measures in Typical Projects

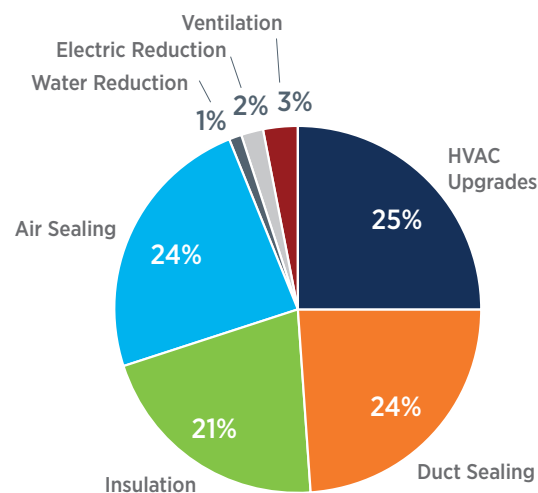


Figure 1 above illustrates the typical breakdown of home performance projects by type of upgrade completed in the home. As shown in the pie chart, HVAC upgrades, air sealing, duct sealing, and insulation make up the bulk of the upgrades The Home Energy Detective performs.



The Home Energy Detective participates in the Northern Virginia Home Performance with ENERGY STAR program (HPwES) and the George Washington Regional Commission's Home Energy Loss Prevention (GW-HELP) Program, which is another regional Home Performance with ENERGY STAR program in Virginia.

Marketing Strategies:

- Bus Billboards
- Newspaper
- Radio
- Energy Makeover Contest
- Video Testimonials
- Websites
- Search Engine Optimization
- Tradeshows
- Word-of-Mouth
- Networking
- Door Hangers

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Troy Tanner, Owner,
the Home Energy Detective

Tanner notes “Video testimonials are the most powerful thing for us right now,” referring to the company's online advertising. Tanner produces all of his own video testimonials and posts them on the company website and on You Tube. Other efforts currently include search engine optimization, which The Home Energy Detective pays a company to do, tradeshow attendance, and grassroots methods like word-of-mouth, door hangers, and networking.

Selling home performance services begins with the first phone call a homeowner makes to The Home Energy Detective. Since the company is small, the owner has the opportunity to speak to each individual about the process of home energy checkups. This is followed by an interview at the house to determine the motivations, goals, and objectives the homeowner has for home energy upgrades. The homeowner is included in each stage of the home assessment and is encouraged to participate in the diagnosis of their home. “Including the customer in the entire process builds strong connections between us and the homeowner,” notes Tanner. One way The Home Energy Detective builds rapport with its customers is to offer them recommendations of things they can do on their own to save money and energy.

Once the initial checkup is complete, assessors develop an action plan, which includes a detailed report that is printed at the house at the conclusion of the checkup. The report addresses all of the findings of the checkup, financial considerations, and specific upgrades that can be performed to address the concerns of the homeowner. The Home Energy Detective has a portable printer to quickly generate assessment reports. “We close a lot of deals because the report is printed and itemized right in the home,” notes Tanner. This zero lag time between the assessment and the proposal delivery helps to account for the company's high (40%-50%) closing rates.

The majority of homeowners who call The Home Energy Detective are experiencing comfort issues in their homes. Rooms that are too cold or hot, floors that are cold, dust and allergies, and other general discomfort issues are primary concerns. Tanner combines these customer concerns with the findings of the initial energy checkup to find the optimal path forward for upgrades. “It's about communicating effectively with the homeowner regarding their comfort issues and finding ways to fix them,” said Tanner, who notes that comfort issues, not energy savings, payback, or return on investment, drive the homeowner's energy-performance upgrade decisions.