

Dr. Energy Saver's GreenPro Home Energy Auditing Software

Opportunity: Sharp increases in energy costs, a poor housing market, and several government incentives for "green" remodeling have piqued homeowner interest in making their home energy efficient. This interest comes at a key time, with Time Magazine and other news venues reporting an energy crisis that can only be solved through the immediate reduction of fossil fuel usage.



This has created a unique opportunity for contractors to motivate homeowners to upgrade their home's energy usage. However, solutions that seem ideal (such as geothermal heat and solar energy) include price tags that are far beyond the average homeowner's investment ability.

A much more realistic and affordable solution for the homeowner is to install energy efficient upgrades into the existing home. This allows them to reduce their energy demand, while simultaneously saving money on their utility bills.

Unfortunately, the green remodeling and retrofitting industry is flooded with misinformation, biased information, and "fads" that do not necessarily represent effective and affordable ways to minimize energy usage. Available software that estimated the value of energy efficient upgrades was highly technical, basing its estimates on sweeping statistical generalizations. There was no technology available that integrated data about the *current condition of the home* – and the energy habits of its inhabitants – into its formula.

Innovative Response/Solution: A) In 2010, Dr. Energy Saver announced its software release of **GreenPro** – a software application that produces *meaningful, highly specific data*. This data is customized to reflect specific potential savings based on the home's current condition and energy use.

This software provides these two advantages:

1. Creates a comprehensive, personalized home energy profile: The home energy profile created by the GreenPro software factors in 372 different pieces of data about each home's energy usage. This profile is made possible by the cumulative efforts of more than 15 years of extensive in-house building science research.

Incorporated data can be as large as their overall monthly energy usage to data as small as what types of light bulbs they're using, or whether or not their refrigerator is Energy Star compliant. Each piece of recorded data is based on the home's current condition, energy usage, and existing energy-using components.

The contractor and homeowner can work together to input as many (or as few factors) as the homeowner would like – the more that are added, the more complete the energy profile becomes. This profile, which is up to 30 pages long, is a comprehensive report of where improvements can be made, and estimates on the cost of each improvement. It also includes photos of problem areas in the home, with written professional explanations of each issue.

2. Features a user-friendly interface for homeowners: The format of the energy profile is created in a simple, user-friendly format, with an energy usage "report card". The language presented in both the program and its report is directed to the lay person, rather than the industry professional. Estimated energy savings are projected for up to 15 years, with annual inflation taken into account.

The homeowner will be able to experiment with the interface to see how adding in one upgrade will affect the potential energy savings of another. For example, the program might report that a furnace upgrade could save \$520/year in energy bills, but the estimated savings may drop to \$183/year if the home was first sealed and insulated.

B) GreenPro is the *only* software that takes a *whole-house approach* to energy upgrades – from the basement to the attic. This allows the homeowner to comparatively shop for their energy upgrades in a simple, real-time application.

To estimate the impact of one upgrade without considering others can overstate potential savings and mislead the customer. GreenPro focuses on *responsible consumer education*, enabling the homeowner to make an informed decision.

Results: A market research team of 50 field representatives has reported that when homeowners have an accurate way to comparatively shop for energy upgrades in their home, they are three times more likely to decide to move forward.

Before GreenPro was released, Dr. Energy Saver representatives were closing sales at a rate of approximately 20%, with a sale average of about \$5,000. Since the software release, the closing ratio has increased to 55%, with customers now investing \$20,000 or more on energy upgrades. Where the approval process of home energy upgrades would generally take three to four months, homeowners are now inclined to schedule their upgrades on the first visit.

By generating a personalized home energy profile through the GreenPro technology, our national franchisees helped homeowners save a reported average of 49.5% on their energy bills. Creating healthier, more comfortable, and more valuable homes is the result.

To date, GreenPro is already in use throughout 16 states, covering 20 franchise operations that serve a population of 11.8 million people. GreenPro provides measurable energy savings to those homeowners, justifying investments that reduce fossil fuel consumption, greenhouse emissions, and foreign fuel dependency.