

The Green Energy Retrofits Business

Energy retrofits are sometimes referred to as “weatherization” but this description does not come close to describing the variety or business scope of this market segment. Let’s first understand energy retrofits, by the numbers.

About The Industry

“According to Cheryl O'Connor, CEO of the **Home Builders Association of Northern California**, retrofits have a great impact on energy efficiency because new homes only represent 1 percent of the total home inventory, with 99 percent being existing homes. To reduce energy use and consumption, the focus should be on retrofitting existing structures since many of these homes were built prior to the energy codes and are not energy efficient. “

“The best-funded opportunities for energy retrofits today are **major upgrades in institutional buildings, especially in federal buildings**. This market, already strong because of federal policy mandates and creditworthiness, received a boost from the American Recovery and Reinvestment Act (ARRA). However, federal non-industrial buildings comprise less than 3% of existing commercial space, and the largest untapped potential is for energy retrofits in private commercial buildings. Pike Research anticipates that the private retrofit sector will experience strong growth through 2014 and beyond, especially as several key market barriers are successfully overcome.” Source: Pike Research – CleanTech Market Intelligence

Primary Green Energy Retrofit Strategies

Source: Green For All www.greenforall.org

Green For All develops and advocates for innovative policies that 1) promote the green-collar economy to solve our greatest problems (the economic recovery and environmental crisis), and 2) enable governments to enact policy at the federal, state and local levels that creates new, quality green jobs and invests in green industries.

With energy costs rising at an alarming rate, many homeowners and businesses are turning to efficiency experts to help them reduce their monthly utility bills. Increasing efficiency not only cuts costs, it also helps the environment. **American buildings are responsible for one-third of the country’s annual greenhouse gas emissions; they consume more than 60% of America’s electricity.** Constructing and operating buildings also takes an environmental toll, requiring large amounts of raw materials and water.⁵¹ By bringing existing buildings up to current standards, we can avoid constructing new buildings, drastically reducing raw materials consumption and greenhouse gas emissions.

Public and private investors are working to expand the opportunities in this field further. For example, John Doerr, a Silicon Valley venture capitalist, was recently quoted in the New York Times proposing a “Cash for Caulkers” program akin to the successful “Cash for Clunkers” automobile trade-in program. “Cash for Caulkers” is the kind of policy innovation we are seeing more of—putting unemployed contractors and construction workers back to work making America’s homes more energy efficient.⁵² A number of tax incentives already encourage businesses and homeowners to make energy-efficiency upgrades to their buildings,⁵³ and more incentives are likely in the future.

Those with backgrounds in construction, roofing, electrical engineering, or architecture have a range of opportunities to start new businesses in the booming green building and energy-efficiency fields. Those with little or no experience have the chance to gain skills and create their own career opportunities.

POTENTIAL BUSINESS OPPORTUNITIES

- **Energy Audits:** Offer energy audits that help homeowners and businesses improve energy efficiency and save money on their utility bills.
- **Duct Cleaning and Repair:** Improve indoor air quality and seal up leaks, which increases energy efficiency.
- **Green Retrofits:** Perform energy-efficiency and green building retrofits (e.g., weatherization, solar panel installation and solar thermal installation) to help building owners reduce their energy consumption and greenhouse gas emissions while increasing the value of their property.⁵⁶ *Example: Recurve in San Francisco, California*
- **Cool Roofing:** Install cool roofs, made from materials that reflect the sun’s heat instead of allowing a building to absorb that heat. Cool roofs increase energy efficiency and reduce the heat-island effect in urban areas. Cool roof installations comply with green building codes and reduce greenhouse gas emissions.
- **Green Roofing:** Install green roofs (or “living roofs”) covered with vegetation and soil. Green roofs have many environmental and energy-efficiency benefits, helping reduce urban air temperatures, providing building insulation, and creating habitat for wildlife.
- **Green Building Products:** Supply green building products to the growing green construction industry *Example: EpOxyGreen in Venice, California*

Starting a Home Energy Audit Business

January 27, 2010 Posted by Damian Styers In: [Home Energy Audits](#)

If you are thinking about starting a home energy audit business, here's what you need to know...

Now is a great time to start a home energy audit business. With all the talk in the news about energy efficiency, with the US Government offering [tax credits for energy efficient upgrades](#), and proposing to get America back to work with its \$23 billion Home Star (aka "Cash for Caulkers") program, the opportunity is waiting for you.

Home Energy Audits Required for Many Tax Incentives and Rebates

In the proposed Cash for Caulkers program, many of the tax incentives offered to consumers will require that they get a home energy audit both before and after their home improvements, in order to measure the amount of energy savings. Energy efficiency must increase by specified amounts in order to qualify for tax incentives and rebates, and energy audits are used to measure energy efficiency.

Home Energy Audit Business Requires Equipment

To run a home energy audit business, you will need some **equipment**. You will need a blower door (which de-pressurizes a home in order to find air leaks), a duct tester (to find air leaks in ductwork), a combustion safety package, and an infrared camera/thermal imager, which allows you to locate areas where insulation is insufficient. All together, this equipment will **cost around \$10,000**. You may be able to lease the equipment, which will help with cash flow when you first start your home energy audit business.

Home Energy Audit Training

Your home energy audit business will need to employ **certified home energy auditors** – or you may want to become a home energy auditor yourself. To do so, you must take the **required training** and get certified by either [RESNET](#) or [BPI](#), the two certification bodies recognized by the US government. To become a certified home energy auditor, you must pass the certification examinations offered by various training providers.

Energy Audit Training & Certification

In April 1995, the National Association of State Energy Officials and Energy Rated Homes of America founded the Residential Energy Services Network (**RESNET**) to develop a national market for home energy rating systems and energy efficient mortgages.

RESNET's standards are officially recognized by the federal government for verification of building energy performance for such programs as federal tax incentives, the Environmental Protection Agency's ENERGY STAR program and the U.S. Department of Energy's Building America Program. RESNET standards are also recognized by the U.S. mortgage industry for capitalizing a building's energy performance in the mortgage loan, and certification of "White Tags" for private financial investors.

The RESNET website is a one-stop solution where homeowners can learn about the energy audit and rating processes, and search the RESNET directory to find certified energy auditors and raters and qualified contractors and builders. To be included in the directory, these independent, unbiased professionals must complete the required energy training to meet the high standards of excellence that RESNET demands. All RESNET-certified and RESNET-qualified professionals agree to abide by the RESNET Code of Conduct. For more information: www.resnet.us

Green Business Start-up: Major Steps

<p>Permits, Codes & Regulations – These will vary widely for each city and county. List applicable permits, codes and regulations.</p>
<p>Energy Audit Training & Certification</p>
<p>Energy Audit Equipment</p>

Resources

1. **Georgia Environmental Finance Authority (GEFA).** GEFA is a state agency that administers a wide variety of programs that provide financial assistance and other support services to improve Georgia’s environment. GEFA’s program focus areas are water, wastewater, solid waste, recycling, land conservation, energy efficiency and fuel storage tanks for local governments, other state agencies and non-profit organizations.
2. **<http://www.lowesforpros.com/lowes-small-business-resources>** Lowes for Pros offers a wide variety of free tools, business guides and information for small business owners in construction, energy retrofit, and building trades.

Short-Cuts

Green For All is a national organization working to build an inclusive green economy strong enough to lift people out of poverty. www.greenforall.org

The Green Business Plan Guide

While there is an abundance of resources focused on how to write a business plan, virtually none of the publications that exist today detail how to include environmental and social justice concerns. This guide attempts to explain how someone focused on the triple bottom line -- profit, planet, and people -- goes about writing a business plan for a truly green business.

Where To Get the Green: Sources of Funds for Green Entrepreneurs

Many people struggle to figure out how they can obtain the capital required to start and/or scale a business. This guide may not offer all of the answers, but it does provide helpful insights into a wide variety of financing options available to aspiring entrepreneurs as well as existing small business owners.

Going Green: A Guide to Greening Your Business

This guide is for the small business owner who is interested in reducing the environmental footprint of his/her company's operations, and provides specific recommendations and resources for those who want to go green -- and save money by doing so

10 Green Business Ideas for New Entrepreneurs

Many people see solar panels and wind turbines, and wonder how they are supposed to engage the green business economy. This guide outlines ten accessible business ideas that can be pursued by just about anyone, including those that are capital constrained

Green Speak: A Glossary of Terms used in Green Business

This glossary provides useful definitions for many of the terminology and buzzwords frequently used within the green industry. This guide serves as an introductory resource for anyone new to the intersection of sustainability and social justice, as well as for those who lack an exhaustive understanding of commonly used jargon.