

## Questions for the Energy Auditor -- and Answers

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1. Let's start a conversation about energy efficiency. Tell us about any common misconceptions we might have.

That it is simple and easy – from changing light bulbs to hiring insulation contractors—and does not require an energy audit. The notion that residences are a complex system needing independent, professional testing and diagnostic work is foreign. The idea that a thorough energy audit provides an action plan for how best to spend (and save) money, including what to ask for from the Insulator or HVAC contractor, is in its infancy. The vast majority of our clients are surprised at most of the findings of our energy audits, as it changes their assumptions.

2. Tell us a little about energy audits. Why are they important? What's the process like? What should homeowners expect? How can they prepare for their audit?

An audit tells our client what efficiency work makes sense. We detail: type of problem, location, severity, and what to do about it. First, we survey comfort and analyze utility use and meet with facility maintenance staff. Next, our on-site diagnostic energy audit includes: blower door test, infrared scanning, combustion appliance and ventilation safety testing, evaluating windows, etc. We provide a written report and present this to the Board, facility staff or committee. On-site testing is not invasive, though we do access “nooks and crannies” such as attics, utility rooms, built-in cabinets, crawlspaces. In most cases we explore all top-floor residences and selected units in other locations.

3. What are energy audit clients most surprised to learn from their audit results?

They are most surprised to learn what is and is not cost effective for energy savings. For example, they are not aware that the payback on replacement windows is 70-100 years; that cellulose insulation is usually superior to fiberglass, that air sealing most often improves safety as well as being highly cost effective, and that almost everything they know (and hear) about venting buildings is wrong.

4. Are there specific challenges that Associations seeking energy efficiency face? Challenges that may not be recognized?

In Illinois, Insulation and HVAC contractors have only recently begun to receive training in best practices for energy efficiency. Most contractors want to learn best practices but are not able to send staff to national conferences and training centers on the subject. Most of our clients are, in turn, surprised to learn that what their insulator or HVAC contractor has recommended might not comply with best practice, may not be most cost effective, and/or may not be effective period.

5. How would you respond to a building owner or Association hesitant to schedule an energy audit because of fear the recommended improvements will be too expensive?

Ignorance is expensive! Making improvements based on what the window, insulation, or HVAC contractor recommends may cost thousands of dollars and yield little improvement. Many clients call us **after** they have made improvements that did not yield energy efficiency or **after** they received hazy (even contradictory) bids from insulators or HVAC contractors. People that get our advice **before** they act usually save money – sometimes thousands of dollars. People who call us **after** they hired work done are often dismayed to learn of mistakes and missed opportunities. On top of better managing installation costs, savings from efficiency are not to be avoided. Efficiency helps stabilize the budget, and many improvements, such as steam system balancing, efficient operation of pool equipment, automatic controls and scheduling, correcting defective

insulation, and air seal work have far higher return than any bank or money market. It is always responsible to check for lost energy and the money lost to energy waste.

6. Is an energy audit required before making any efficiency improvements?

eZing always encourages action to reduce energy use. Most everyone has replaced some lighting with high efficiency lamps, and in most cases this is straightforward. Responding directly to discomfort, most people have found spots where cold air leaks into their residence. We do more than audit, so ask us for information or a workshop for help in going further with “do-it-ourself” installation. We point out that an energy audit provides a helpful “game plan” to see the limits of inexpensive do-it-yourself work. A knowledgeable plan is helpful when selecting improvements that are not low cost, though cost is less than not attending to more major types of energy waste.

7. Is there funding to help Condominium (Co-op) and Townhome Associations attend to major types of energy waste?

There are a variety of incentives. Illinois has an excellent program for commercial buildings, and the [www.SEDAC.org](http://www.SEDAC.org) web site has information on most types of energy funding. Certainly every person responsible for energy use should take advantage of 30% off the cost of efficiency. Subtract directly from federal income tax owed. In a condominium, installation that benefits the entire building is apportioned to owners according to their assessment. As much as \$1,500 can be claimed, based on \$5,000 of qualifying expenditure for efficiency. Federal energy tax credits are scheduled to terminate with work installed before/up to Dec 31, 2010. Energy Star has a nice review of energy tax credits. We caution that some measures may qualify for tax credit though they may not best meet needs to reduce energy waste particular to your building. It is best to spend for improvements that do both.

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## About eZing

eZing conducts energy audits and performance certification (e.g., Energy Star, modeling, design consulting) and we are owners representative for quality assurance during installation. Clients receive independent and thorough guidance based on 34 yrs experience with energy auditing throughout the greater Chicago metro area. We respond to residential and commercial clients who want energy efficiency to make sense.

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