

What's Wrong with the Home-Energy Audit Industry?

Conflicts of interest abound, consumers balk at the price of an audit, and nobody is leading change



By [Michael Chandler](#) | September 30, 2008

A professional bio card for Michael Chandler. It features a larger portrait of him on the left and a list of achievements on the right. The text is set against a light, textured background with a dark grey header.

Michael Chandler
BUILDER AND PLUMBER

- President, Chandler Design-Build
- Helped create the new NAHB-ICC National Green Building Standard
- National Green Building Awards Finalist, 2006 & 2007 Custom Home of the Year
- Master plumber

"Life is too short to waste time building ugly homes."

As satisfying as it is to build new high-performance homes, I have to admit that if I really cared about stopping global warming and conserving energy I'd refocus my company to perform home energy audits and work that would stop the outrageous waste of energy in our existing housing stock. The reason I don't do this is mostly because I'm having so much fun building new homes, but it's also because I don't see how energy audits can be done in a way that would make a profit.

Until recently, I could assuage my guilt by recommending that people in existing homes call one of the larger Energy Star raters in our area. But now they have stopped performing energy audits on existing, occupied homes. It turns out that they couldn't figure out how to make a profit at it, either. So here is the paradigm we are dealing with in North Carolina: If you want an energy audit performed on a home you are living in you most likely will have to deal with an auditor who is operating out of a beat-up truck and keeps his laptop and answering machine in his spare bedroom. You'll call and if you're lucky he'll get back to you within the week, and maybe he'll be able to get to your house within the month. He may or may not get your report and recommendations written up and returned to you, with an invoice, in a timely fashion.

What is wrong with this picture? How can we fix it?

Existing homes are MUCH more difficult to analyze and do meaningful blower door and duct blaster testing on than new construction. You've got furniture,

clutter, and old plaster and paint to protect. The HVAC equipment may be 20 years old and not have any service manual. The bath fans and kitchen hoods are likely to be badly under-performing and require individual testing. You really can't do a good job solo. And you're not likely to get it done before lunch. At a minimum you need to plan for six hours onsite with two workers in a high liability environment and another two hours off-site typing up the report. The going rate for this is \$600 to \$800 and homeowners bitterly gripe about that minimal cost. Can you write a logical, sustainable business plan that has you sending employees into occupied homes (where they may knock over lamps or track mud on carpets) and has a coordinator to answer phones and to schedule visits and follow-up at this rate? The answer is no.

How did we get in this fix?

It's the unintended consequence of well-intentioned actions once again. Back in the Carter administration we had "the moral equivalent of war" to save energy and we sent weatherization teams out into the homes of the poor and needy to help them stop wasting energy. We used a lot of low-paid, part-time, barely-insured do-gooders who were willing to work for cheap and forgo health insurance to be "part of the solution." And they shut down and went away once the co-op subsidy dollars got thin.

Can we create a new model where auditors actually earn \$1,200 to \$1,800 per audit and can afford to have a professional organization that pays taxes and insurance and can grow a professional crew of home energy auditors? That's hard to do in a culture that is accustomed to valuing this as a nasty job that ought to be subsidized by the government or (I'm serious here) utility companies. Let's put Exxon in charge of retrofitting Hummers to burn less gas while we're at it and let's set the rate low enough that they're guaranteed to lose money.

The market is trying to adapt. We're seeing insulation and weatherization companies offer home energy audits. Seems logical enough: call one number and get the diagnosis and the prescription filled from the same source. But people who have no problem with the energy company doing the energy audit somehow are more likely to see a conflict of interest in having an insulation company do it. My dad used to say, "If all you have is a hammer, everything starts to look like a nail," and that concern is justified.

But what we have isn't working. The public expects energy audits to be free or cheap and we have something like 75 million homes in desperate need of energy remediation to even get close to current watered down code requirements. Additionally we have thousands of homes ten years old and less that are wasting energy despite being built in compliance with the inadequate codes of their time. We need a new paradigm and we need it soon.

In the commercial sector companies like [Advanced Energy](#) are going into existing factories and replacing outdated electric motors with new energy-efficient ones in exchange for a percentage of future fuel savings. I don't see this working with home weatherization but we need to at least be thinking outside of the box here. Our electrical distribution system is at its limit. Even if we could build more electric plants we are losing the capacity to reliably move this additional power to where it is needed. So, as a society, our best investment is in energy conservation in our existing building stock, both residential and commercial. We'll never get there if we ensure that building diagnosticians are underpaid and unable to make up for it by selling and installing the products they need to fix the problems they encounter.

Somebody smarter than me needs to figure out how to lick this problem and get word to the next president as soon as possible so that we can start turning this ship around.

—Michael Chandler is a builder, master plumber, and electrician near Chapel Hill, North Carolina. His website is www.ChandlerDesignBuild.com