

### CAREER PROFILE: JIM BROWN, ENERGY AUDITOR

I help people save money and protect the environment by showing them ways to save energy in their home or work. As an energy auditor, I examine how energy is being used in a building and then make energy efficiency and conservation recommendations to the people who live or work in the building. I might suggest that they buy new, more energy-efficient appliances and equipment to replace older, less efficient models. There are also lots of different conservation strategies that I tell people about.

One of the most common things that I will do in any building is to switch all of the inefficient, incandescent light bulbs to compact fluorescents or other highly efficient lighting technologies. Another lighting technology that I really like is the passive solar technology that allows the use of daylight, which means letting sunlight into the building instead of turning on electric lights. When a building is designed properly, there often is little need for lights during the daytime.

When I perform an energy audit, I use specialized tools, such as Kill A Watt Meters, blower doors, air flow meters, and infrared cameras to evaluate how much energy a building is using. Kill A Watt meters measure how much electricity an appliance uses when it is on. They are also very helpful in finding energy vampires and phantom loads—appliances that use energy even when they are turned off. My favorite tool is a blower door, which is used to depressurize a building. By forcing air out of the building with the blower door, I can then find where air is leaking into or out of a building. Air leaks can account for a large percentage of the energy used for heating and cooling a building. Infrared cameras can help me pinpoint exactly where the leaks are so that I can come up with a plan to fix them.

Energy auditing is a fun job that involves science, technology, and a good deal of problem solving. The most rewarding parts of the job is knowing that I'm doing something good for the environment and helping people save money. Growing concerns about climate change, energy security, and fuel prices mean that there's more and more work for energy auditors. It's a good career to consider.