

## Five Surprising Things about Saving Energy in the Home

By Steve Hoffman, Executive Director, NW Center for Sustainability and Innovation

I direct a nonprofit organization in the Pacific Northwest that focuses on sustainable energy. We have dug deep into the fast-moving field of home energy efficiency. Here are some of the most important things we have learned.

*One: State-of-the-art building science tells us that **insulating your home is not enough**. Leading experts put it this way: “Insulating your home without air sealing is like putting insulation over an open window.”* However, many professional insulators (and most do-it-yourselfers) do not do air sealing, and air leaks are often hidden.

*Two: Building Scientists have identified a host of misconceptions, and are trying hard to correct them. A big one involves ‘replacing windows.’* An overwhelming majority of Building Science experts say that ‘replacing windows’ is usually *not* cost-effective. They state that there are many less expensive, more cost-effective things you can do to save energy.

*Three: Saving energy saves money, but it often has other beneficial effects: increased comfort in the home, improved indoor air quality, and a more durable home [due to reduced moisture].* And, of course, there are broader, sustainability-related impacts.

*Four: This is an unusually good time to have a professional home performance evaluation done. Rebates and incentives are available from a variety of sources.* We fully support “DIY,” or do-it-yourself home improvement. However, homes need to be treated as ‘whole systems’ to make them perform well. Attention to detail is key, and knowledge of building science, plus hands-on experience, helps avoid pitfalls. It’s smart for most folks to take advantage of incentives and work with an energy-efficiency professional.

*Five: “Building Science” is a fast-evolving, complicated field.* Several national organizations certify Building Analysts, Building Envelope Professionals, Thermographers, and others to make homes energy-efficient. New innovations appear all the time, and it takes work to sort through them. We worked with one builder who was very surprised—a home that he very carefully ‘built to code’ 11 years ago was only average in terms of air leakage.

Energy efficiency makes very good sense, for lots of reasons. Please contact us at [info@nwcenterforsustainability.org](mailto:info@nwcenterforsustainability.org) if you would like more information about how to make your home more efficient.

© Steve Hoffman, NW Center for Sustainability and Innovation [a 501(c)3 nonprofit organization in Western WA], 2011, All Rights Reserved.