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Office of Energy Efficiency & Renewable Energy

DOE Zero Energy Ready Home

A Note from Sam Rashkin:

Educating Appraisers Begins with a Consistent Framework

More on appraisers later; first some history. Back in April I wrapped up my 'Note From Sam' on the DOE Race to Zero Student Design Competition with a promise to talk about another DOE building science education initiative in the next newsletter. Okay, I lied. It's several issues later, but now I'm ready. The Race to Zero is a great event for inspiring students to pursue careers in sustainable buildings and to increasingly get building science integrated in university programs for architects, engineers, and construction managers. But it's not nearly enough. A consistent platform for building science competency is badly needed across all workforce classifications. Hopefully many of you are familiar with the important content in DOE's Workforce Guidelines that serves as a comprehensive reference with vast amount of details and scopes of work for residential retrofit measures. Beyond this task oriented guidance, we need a framework for establishing core competencies across broader building science skills for all workforce classifications involved in residential and commercial buildings. That's where the second DOE building science education initiative comes in. [Guidelines for Building Science Education](#) (GBSE) have been developed with input from several expert meetings. Each guideline provides a competency profile across a consistent set of building science skills for each workforce classification (see sample below). These guidelines can now be used as a consistent framework to inform preparation of text books, curriculum, class notes, testing, licensing, and certification requirements.

As part of this initiative, DOE is developing a GBSE Solution Center that is intended to serve as a repository for the best building science education content. To find relevant content, a user would simply specify a workforce classification (e.g., Appraiser) and the tool would provide the appropriate-level content across all key building science skills, consistent with the guideline competency assessment for that professional. If you do some of your own training and would like to

provide content for this resource, please email Cheryn.metzger@pnnl.gov.

Stay tuned for further details on the new GBSE solution center, including a detailed webinar in October. Which brings me back to the title of this article. After presenting over 30 Zero Energy Ready Home training seminars, without exception there is always a question about how to ensure the appraisal process recognizes the value of high-performance homes. After all, shouldn't appraiser education include content on why buildings have more value if they manage air, thermal, moisture, and vapor flow? The answer is, absolutely yes, and it all begins with the GBSE framework. The Appraisal Foundation agrees and we have been able to establish an MOU to start the process of infusing more of the GBSE into their materials and training. But let's not stop there. There are approximately 20 workforce classifications to initiate into this process.

Pulling Consumers to Zero – The 'Tour of Zero' National Campaign

If every homebuyer acted in their own self-interest, they would consistently choose a U.S. Department of Energy (DOE) Zero Energy Ready Home (ZERH) where the monthly utility bill savings easily exceed the additional monthly mortgage cost for proven innovations providing superior efficiency, comfort, health, and durability. In other words, they would choose a better home for lower cost. The challenge is mobilizing consumers across the country to experience this difference so they can make more informed home purchase

decisions. After all, the home is often the largest purchase of a lifetime.

This is where the [DOE 'Tour of Zero'](#) comes in. It provides the opportunity for visitors to the ZERH web site to take a virtual tour of zero energy ready homes in every major U.S. climate zone featuring extensive photographs, homeowner testimonials, lists of innovations, floor plans, and key statistics that include incredibly low or no annual energy consumption.

The national campaign is where you come in. DOE needs 'Innovation Partners' who are stakeholders vested in high-performance homes (e.g., manufacturers, associations, NGO's, utilities, and government programs) to engage American consumers to take the 'Tour of Zero' and see the home of the future that is available today. Collectively we can increase homebuyer awareness and interest in Zero Energy Homes that are better for themselves, their communities, and our nation. We invite you to [attend the first webinar](#) on the 'Tour of Zero' national campaign on October 13 at 2:00 p.m. EST and learn more about this important opportunity to change the housing landscape. Look for further DOE announcements or visit the [Zero Energy Ready Home Web Site](#) for more details.



ZERH Housing Innovation Awards at EEBA!

It's that time of year again, the 2015 Zero Energy Ready Home Housing Innovation Awards are just a month away! This year's award ceremony will be held October 6th at the EEBA Excellence in Building Conference & Expo in Denver, Colorado. Since 2013, the DOE Housing Innovation Awards have recognized leaders in building innovation who are changing the way homes are designed and constructed, providing better places for Americans to live, stronger communities, and a more economically and environmentally resilient nation.



The [2015 Housing Innovation Award winners](#) were selected from four categories: custom, production, affordable, and multi-family. This year's awards feature 27 homes from 24 builders throughout the country, each of which represents the superior home performance of a ZERH certified home. A Grand Winner from each category, selected by an esteemed panel of judges, will be announced at the awards ceremony in Denver.

If you can't join us in person, you can still stay up to date by following #2015HIA on Twitter and Facebook to check out all the action!

Streamlined ENERGY STAR Certified Home Version 3.0 Specs Now in Effect

The U.S. Department of Energy (DOE) has three key requirements to earn the Zero Energy Ready Home (ZERH) label:

- high efficiency levels;
- key performance measures addressing moisture, comfort, and IAQ; and
- renewable-readiness

Solid building science is a critical foundation to ensuring that **any** new home – even code minimum - works well, and that is why DOE ZERH makes ENERGY STAR Certified Homes a prerequisite.

So it's crucial for our partners to be familiar with [Revision 08 of the ENERGY STAR](#) Certified Home v3.0 specs, just released in July 2015. Revision 08 is the most significant revision of the ENERGY STAR Certified Homes specs since the release of Version 3. This update reduces the paperwork and streamlines the certification process, making it easier to certify a home under v3 or v3.1.

ENERGY STAR Certified Homes has several upcoming webinars specifically geared for builders, HVAC contractors and designers, and energy raters – with times, dates, and registration links [listed here](#).

Upcoming Webinars

Turning the Building America Solution Center into an Expert Advisor

September 24, 2014 12:00 PM to 1:30 PM EDT

Presenters:

Sam Rashkin (U.S. DOE), Chrissi Antonopolous (PNNL)

Description: As we have often said, the [Building America Solution Center](#) (BASC) is your new best friend if you have anything to do with high-performance homes. It provides extensive, up-to-date content needed to integrate building science best practices in specifications, field applications, education, and code official meetings. In this webinar, Sam Rashkin and Chrissi Antonopolous will be diving into how to use the BASC for specific projects including preparation of:

- **Sales Binders** bundling relevant BASC guides for an individual home or standard construction practices;
- **Customized Point-of-Sale Fact Sheets** that list key innovations by attribute (e.g., comfort, health, efficiency) using value-based terminology from the Building Science Translator;
- **Field Guidance Packages** including construction images for targeted measures and how to pull them up on the Mobile app;
- **Building Science Presentations** using content from the BASC guides;
- **Precedence Packages** that document an empirical basis for preferred measures to code officials or key builder decision-makers; and
- **CAD Drawings** bundled for inclusion in construction documents.

[**Register Now**](#)

Tour of Zero: How You Can Help Customers Find Better Homes at a Lower Cost

October 13, 2015 2:00 PM to 3:00 PM EDT

October 28, 2015 2:30 PM to 3:30 PM EDT

Presenter: Sam Rashkin, Chief Architect, U.S. DOE

Description: Are you interested in helping homebuyers find a better home at a lower cost? The DOE Tour of Zero provides the opportunity for visitors to take a virtual tour of high performance, Zero Energy Ready Homes in every major U.S. climate zone and browse extensive photographs, homeowner testimonials, lists of innovations, floor plans, and key statistics including data on incredibly low or no annual energy consumption. But a challenge is mobilizing consumers across the country to experience this difference so they can make more informed home purchase decisions. This national campaign is where you come in. DOE needs Innovation Partners vested in high-performance homes (e.g., manufacturers, associations, non-governmental organizations, utilities, and government programs) to engage American consumers to take the Tour of Zero and see the homes of the future that are available today. Collectively, we can increase homebuyer awareness and interest in zero energy homes that are better for homebuyers, communities, and the nation. Please join Sam Rashkin (U.S. DOE) in this webinar to learn more about this important opportunity to change the housing landscape.

[10/13 Registration](#)

[10/28 Registration](#)

Selling Zero Energy Ready Homes Made Easy: Tools and Resources that Work

October 21, 2015 12:00 PM - 1:00 PM EDT

Presenter: Sam Rashkin, Chief Architect, U.S. DOE

Description: If you haven't been watching closely, the Zero Energy Ready Home now has an impressive array of tools that can help builder partners effectively communicate the value of their certified homes. In this webinar, Sam Rashkin will be covering these resources including:

- Customized Comparison Bar Fact Sheet
- Customized Brochure
- Housing Innovation Awards
- 'Tour of Zero'
- Drop-in Messaging
- ZERH Homeowner Manual

- Trade Partner Recognition Fact Sheet
- Building Science Translator Sales Tool

[Register Now](#)

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