



Briefing Notice

Can Housing Be Affordable, Resilient, and Sustainable?

Tuesday, December 2, 2014

2 PM – 3:30 PM

2203 Rayburn House Office Building

Please RSVP to expedite check-in: www.eesi.org/120214housing#rsvp

The **Environmental and Energy Study Institute** (EESI) invites you to a briefing about how building science, renewable energy technology, creative community engagement and innovative partnerships are beginning to converge for the benefit of home owners and tenants in every income bracket. Well-built, ultra-energy efficient homes with on-site solar energy stay safe, comfortable and functional during severe weather and power outages. They are good for our health, our budgets and have less environmental impact than most houses being built today. The goals of affordability, resiliency and sustainability are truly complementary but difficult to achieve without key elements such as trained building professionals, accurate tools to measure energy use and improved appraisals and financing. Briefing speakers will discuss affordable housing in Washington, DC, and elsewhere that has achieved the coveted “passive house” (PH) certification as well as a new approach to enable low-income residents to enjoy some of the benefits of on-site solar energy. The briefing will also discuss policies that could make this housing truly resilient, more affordable and a model for other communities.

- **The Honorable Jim Himes**, U.S. Representative (CT), Introductory remarks
- **Katrin Klingenberg**, Co-Founder and Executive Director, Passive House Institute U.S. (PHIUS)
- **Nicole Steele**, Executive Director, Grid Alternatives Mid-Atlantic
- **Orlando Velez**, Director of Housing Programs & Community Advocacy, Habitat for Humanity DC

Passive design refers to the reliance on sound building science, precise design and construction and high-performance materials instead of mechanical systems to create a structure that is extremely airtight and energy efficient. “Passive solar” strategies are used to naturally regulate heating and cooling. These airtight structures, however, also use an energy-recovery ventilator to ensure excellent indoor air quality and comfort with minimal energy use. In addition, “active” cooling and dehumidification is important in hot and humid climates. For this reason, the Passive House Institute U.S. is working with the U.S. Department of Energy to modify and adapt the German Passivhaus standard for the multi-climate U.S. market. The hallmarks of passive houses are enhanced insulation and air sealing, triple-pane windows, and performance-measurement and verification. These principles can be applied to single-family and multifamily housing, schools, office buildings, even skyscrapers. What sets the passive design methodology apart from all others is its proven ability to reduce heating and cooling energy use by up to 90 percent compared to conventional construction. With such a low “energy load” and cost savings, these buildings can then cost-effectively incorporate other “green” features and renewable energy technologies for their electricity needs and achieve near-zero energy use and carbon emissions.

Though many industry professionals are striving to make green building affordable, U.S. housing policies and underwriting standards are sorely outdated, making it difficult for buyers to qualify for above-code homes and in turn making it difficult for builders to build them cost competitively. Several bills that would make it easier to build and sell homes that are both affordable and sustainable are before Congress, including the *Sensible Accounting to Value Energy Act* (SAVE) and the *Multifamily Energy Efficiency Improvement Act of 2014*.

This event is free and open to the public.

For more information, contact Ellen Vaughan at evaughan@eesi.org or (202) 662-1893.

