

Workshop Title:

Homes to Community Footprints: Tracking energy use and targeting 2030:

Are you interested in helping Green your Community? Building professionals trained in Green Design are uniquely qualified to provide needed leadership and vision to assist their communities in tracking the energy use of individual homes and buildings. Two architects, a Builder and a Masters of Sustainable Design Graduate have come together for this session to share their efforts and strategies.

The presenters will share results from the following three distinct projects: 1. The ICLEI greenhouse gas protocol, step #1 of a Climate Action Plan for a Town of 20,000 in MA ; 2. A new web-service offering an open source, on-line database of energy ratings linked to Google map and HERS ratings for homes; 3. A review of the national energy use data published by the Energy Information Administration (EIA), linked to ongoing studies for benchmarking homes.

We will discuss the relative GHG contributions of efficiency and renewables, new construction vs renovations, and how buildings compare to other sectors of community energy use. The session will close with cost effective building and design techniques and tools (including DER's and Passive House standards) as we look towards 80% energy reduction for 2030, while engaging community buy-in and new technology.

Objective 1: Participants will learn how the baseline energy consumption of a home and a community are established. They will learn what percentage of the town's carbon footprint relates to the various building types and energy uses.

Objective 2: Participants will explore a pathway to achieve the energy reduction goals set forth in the Architecture 2030 Challenge and other agendas.

Objective 3: Participants will be presented with actual energy consumption data from built projects to analyze and discuss with systems for evaluating building efficiency such as KBTU/sf and MMBTU/YR.

Objective 4: Participants will learn cost effective building and design techniques for achieving the dramatic energy reductions necessary to meet the goals of the 2030 Challenge, reviewing actual cutting edge projects.

Henry MacLean AIA, LEED AP is an architect, educator, and principal of his firm Timeless Architecture. Actively promoting green design in the northeast since 1987, he currently teaches at the Boston Architectural College. His articles and project have appeared in publications including the Boston Globe, Architecture Boston, and Preservation Magazine.

J.B. Clancy is an architect and partner at Albert, Righter and Tittmann, Architects in Boston. J.B.'s main focus is residential architecture and sustainable design. J.B. is a Passive House Consultant and has designed a Certified Passive House for Habitat for Humanity in Vermont.

Keith Burrows, LEED-AP is graduate of Boston Architectural College's Master of Design Studies in Sustainable Design program. He is using the knowledge obtained at the BAC and his background in computer science to develop an operational rating system for homes based on the benchmarking of Energy Use Intensity (EUI).

Brian Butler is a general contractor who founded Boston Green Building in 2007. His aim was to establish a model for truly sustainable general contracting. His passion is for high performance, high comfort, healthy buildings that sacrifice nothing, yet demand little to no energy in their creation, and over their lifespans.