



THE SELECT COMMITTEE ON
ENERGY INDEPENDENCE AND GLOBAL WARMING

Remarks of Edward Markey, Chair
Select Committee on Energy Independence and Global Warming
April 14, 2008 Hearing

Building Green, Saving Green: Constructing Sustainable and Energy-Efficient Buildings

Ask most people what contributes up to half of U.S. greenhouse gas emissions, and they will likely say cars. But the truth is as plain as the walls that you face. The building sector is responsible for up to 48 percent of our nation's emissions. On a local level buildings can account for an even higher percentage of emissions: 78 percent of Boston's heat-trapping gases are attributed to buildings. Energy-efficient buildings must be part of a comprehensive fight against global warming.

Efficient design, low-emission construction materials, and decreased energy use in buildings can combat global warming and simultaneously reduce the rising costs of lighting, heating and cooling structures. Energy efficiency in buildings is only a starting point: a truly "green" building should help preserve natural resources. Water use should be minimized. Construction materials should be non-toxic and travel shorter distances. Appliances and furnishings should use less energy and fewer toxic chemical compounds. Most importantly, we must ensure that all buildings receive this treatment whether they are new or already built, commercial or residential, public or private.

Though measures to improve building efficiency can cost an additional \$1 to \$5 per square foot, consumers get a good return on their investment: the average "green" building can save 25 to 30 percent more energy than a traditional one. The overall economic and environmental benefits of more efficient buildings are clear. However, the competing interests of the building sector can obscure the long-term benefits. A developer may have concerns about recovering the initial costs of green design or energy efficient features. A commercial tenant may not want to pay for efficiency upgrades on a five-year lease. A homeowner may not have the initial capital needed to improve home efficiency, or may not be planning to be in the house for another ten years to get the full return on the investment.

In a recent survey, only seven percent of the public identified buildings as a major source of global warming emissions. Today, we hope to change that perception by discussing various approaches to improving building efficiency. The witnesses are collectively utilizing innovative local approaches, materials, mandatory codes, and voluntary guidelines to reduce this massive source of emissions. Mayor Newsom has sustained and implemented a myriad of green building initiatives (among other

notable environmental efforts) in San Francisco. ASHRAE is an engineering society whose mission is to advance energy efficiency technology. They have developed building and energy codes used by local, state and federal governments. The U.S. Green Buildings Council has developed LEED, one of the most commonly used certification programs for a green building. Enterprise Community Partners helps low income housing—buildings with the tightest construction budgets—become sustainable in a cost-efficient manner. And we will also hear from Dryvit, a corporation working to improve the efficiency of buildings with what they call “outsulation”.

As a final note I would like to add that three of you are actually seated for change in environmentally friendly chairs. These chairs were built from recyclable materials, created using alternative energy, and can be nearly fully recycled as well. Thank you for coming to testify on this important issue.