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Public Safety Committee
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Testimony of Martin Mador
HB 6284 an Act Concerning Adoption of a Model Energy Code
and Green Building Standards

I am Martin Mador, 130 Highland Ave., Hamden, CT 06518. I am the Legislative and Political Chair of the Connecticut Sierra Club. I possess a Master's of Environmental Management degree from Yale. I am LEED accredited by the US Green Building Council. I am the co-editor and chapter author of Biophilic Design, the Theory, Science, and Practice of Bringing Buildings to Life (Wiley, 2008), a book about architecture and the natural world. I am the original drafter of green schools legislation in Connecticut, and have testified in public hearings on green buildings every year since 2002.

PA 07-242 required LEED be added to the state building code, making it applicable to all major construction in the state, including commercial. However, LEED is an optional point system. An owner/builder decides which of the 59 LEED points is appropriate for the project. There are only a few prerequisites. The more points earned, the higher the certification level. LEED silver requires at least 33 of any of the 59 points, with at least 2 energy points earned. It is not possible to fit an optional point system such as LEED into a building code.

The purposes of PA 07-242 were laudable: to require major commercial construction in Connecticut be built to green standards. As green buildings have many public benefits, it is appropriate to require them, even for private construction. These benefits include minimal damage and site impacts to the surrounding environment; decreased water consumption (demand on potable water supply); less construction material sent to landfills; minimal impacts of stormwater runoff (need for infrastructure); promotion of mass transit; and manifold health benefits to occupants of the building. Decreased energy consumption means less fossil fuel use, decreased global warming emissions, decreased need for additional electrical generating capacity, and decreased air pollution.

HB 6284 is an attempt to craft a workable replacement for this provision of PA 07-242. It does not do that as drafted. It could do this by actually requiring LEED certification at the Silver level or beyond. I believe the state does have the power to require such certification. Certification using an equivalent standard to LEED-silver, if such an alternative actually exists, could be required, as long as third party certification was required. Green Globes, while similar to LEED, is not as strong a protocol as LEED, and does not have adequate third party certification. I do not consider it a functional equivalent, and recommend any reference to it be dropped. The National Association of Home Builder's standard is not relevant in this context, as this will apply to larger commercial buildings.

I recommend the following to this Committee. Require that Codes and Standards incorporate as many of the individual LEED credits, except energy, into the state building code as they deem practical. There are several efforts underway nationally to establish a green building code incorporating all aspects of green building, but none of them have been completed or released. If they become available during the deliberation process, Codes and Standards should be directed to consider them.

Energy, however, is a special case, as LEED simply provides for a range of points depending on the energy performance beyond baseline. The bill should specify that building energy performance "exceed the requirements of the version of ASHRAE 90.1 current at the time of adoption by x percent". Using 20 % for "x" would be a modest aspiration, and the minimal reasonable amount. Anything greater than 20% would signal a desire for significant improvement.

The legislature should specify which buildings are subject to the requirement. This is more properly a legislative decision than a code writing decision. It should refer to minimum building size, rather than cost. I suggest all buildings greater than 25,000 or perhaps 35,000 square feet be subject to the requirements. Residential buildings with no more than four units should be exempt.