

September 16, 2010

North Dakota Legislative Council  
Senator Rich Wardner, Chairman  
Energy Development and Transmission Committee  
Presentation from USGBC-North Dakota Chapter

Mr. Chairman and members of the Energy Development and Transmission Committee, thank you for the opportunity to speak to you today, in support of ND Bill #10067.0100, creating a Building Construction Standard. I am Rebecca Molldrem, Chair of the US Green Building Council-North Dakota Chapter. With me is David Shultz and Katie Vasbinder, Board Members for the USGBC-ND., and we are all LEED Accredited Professionals and working in the architectural field in North Dakota.

**US Green Building Council – North Dakota Chapter**

USGBC North Dakota's vision is "Better living in North Dakota through green environments." The Chapter's mission is to be the center for knowledge and advocacy of sustainable built environments in the State. The Chapter is the leader for the transformation to a more ecological way of planning and building that incorporates green design principles through education and collaboration. Through prudent design, buildings can operate more cost effectively, reducing energy consumption, reducing consumption of physical resources, reducing environmental impacts, and increasing the productivity and health of employees.

The parent organization, the US Green Building Council's vision is "Buildings and communities will regenerate and sustain the health and vitality of all life within a generation." While the USGBC developed the LEED Building Rating System, they are not longer affiliated with the administration of that program. As a 501(c) 3 the focus is broader, committed to a prosperous and sustainable future for our nation through cost-efficient and energy-saving green buildings

**USGBC North Dakota supports legislation to create a Public Building Construction Standard in the State of North Dakota.** Bill 10067.0100 is an important step in that direction. We agree that there are ambiguities in some of the current language of the bill as you have heard in previous testimony. But we do not agree that that is grounds for rejecting the Bill in its entirety.

We are fortunate to have a strong energy economy in North Dakota. The state is poised to continue that leadership position with the continued development and deployment of Clean Energy alternatives including wind, bio-fuels, and new technological development such as hydrogen research underway in the Technology Corridor. But let's look at the demand side – it doesn't make sense to focus on efficient energy production without also demonstrating leadership in reducing consumptions. In the United States our buildings consume 40% of the total energy and 70% of the electrical energy. Requiring buildings to be designed and operated in a manner that is energy efficient is only prudent to reduce

operating costs and environmental impacts. This is especially true for public buildings that serve for generations and operate with the taxpayer's money.

### **Why is a LEED Standard an effective benchmark?**

LEED has been adopted by 34 States as the tool for measuring building energy and environmental performance. LEED has become the leading standard adopted not only by states but a full range of governmental jurisdictions, and local governing boards:

- a. 34 state governments
- b. 243 local units of government
- c. 14 federal agencies or departments
- d. Numerous public school and higher education jurisdictions.

There is a strong precedence for States and other units of government adopting energy/environmental standards, with LEED being most prevalent.

### **Are there other Standards?**

Yes. They include Green Globes, Energy Star, MN Green Star, and the recently developed ASHRAE 189.1 standard and International Green Construction Code. While not as widely adopted, these standards are also effective tools to measure energy and environmental performance. In some States a performance requirement is set, with several of the benchmarking standards approved for documenting the performance.

### **LEED is a comprehensive standard that goes beyond energy efficiency. Why is this important?**

LEED (and other prescriptive standards) are premised not only on energy reduction, but on a broad range of attributes to reduce local and global environmental impacts and result in healthy indoor environments that boost productivity, learning and physical health. The intent to view the full range of impacts that building make on the environment, building occupants and the planet.

LEED comprehensive standard includes the following primary focus areas:

***Sustainable Sites:*** Reducing the impact of development on the site, including storm water management, water conservation, and reduced maintenance.

***Water Efficiency:*** Reducing water consumption through water-reducing fixtures, rain-water capture or water recycling.

***Energy and Atmosphere:*** Energy efficient building design, systems commissioning, green power and reduction of ozone-depleting refrigerants.

***Materials and Resources:*** Reuse of existing facilities, use of recycled/recyclable materials, locally sourced materials, and reduction of construction waste.

***Indoor Environmental Quality:*** Healthy indoor environments through access to daylight and views, reduction of indoor pollutants and maximized environmental control.

**What is the cost of requiring buildings to meet LEED certification?**

**Building Construction Costs:** An independent study was conducted by Davis Langdon (last updated in 2006 to compare the cost of green building to those that did not have a goal of being sustainable. , 221 buildings were analyzed of which 83 were selected to achieve some level of LEED. The other 183 projects were buildings of similar program types which did not have a goal of sustainable design. Their findings included the following:

1. The study's analysis suggests that the cost per square foot for buildings seeking LEED certification falls into the existing range of costs for buildings of similar program type.
2. Costs are not necessarily cumulative. In many cases, a design feature that allows a project to meet one sustainable design criteria will also allow that project to meet other criteria, without any additional cost impact beyond that resulting from the first point.

**Life-Cycle Costs – The whole picture:** A key attribute to sustainable building practices is the careful evaluation of building systems and facility operational costs across the full life of the building. We are all concerned about the project budget at the time construction, but the larger cost of buildings is in their operation. A payback analysis, inherent in any green standard, informs decisions that will reduce the cost of operations. The place to reap those benefits is early in the design, where each incremental savings can be leveraged with savings from related systems. For instance, reducing the energy consumption for lighting not only benefits the 'light bill', but allows the air conditioning system to be smaller and more efficient.

**Compliance/Administrative Costs: Costs associated with meeting the prescriptive requirement:**

LEED costs are often seen as upfront only. When seen as below-the-line items, they are seen as upgrades and additions and are often incorporated in an ineffective way or the objective to meet LEED is lost. Items such as commissioning, which are often a line item, can help the team develop an efficient design, and have been shown to maximize the efficiency of the designed building systems resulting in maximized building performance.

**Recommendations for the North Dakota Building Construction Standard**

Previous testimony regarding ND Bill # 1067.0100 has discussed administrative concerns and potential ambiguities in the present language of the Bill. USGBC-North Dakota recommends that the Construction Standard adopted by the South Dakota Legislature in 2008 be reviewed as model language for the North Dakota Bill. A copy is attached.

**Thank you for the opportunity to present our support for a Building Construction Standard for the State of North Dakota. USGBC-ND stands ready to assist the Committee in developing language for a successful Building Construction Standard proposal to the 2011 Legislative Assembly.**

Sincerely,

US Green Building Council – North Dakota Chapter  
Rebecca Molldrem, Chair

