

Public Hearing Testimony Speaker: WILLIAM LEAHY



Date: 3-12-07 Bill Number: 7346

At Eastern Connecticut
State University

March 12, 2007

Senator Thomas Gaffey, Co-Chair, Education Committee
Representative Andrew Fleischmann, Co-Chair Education Committee
Member of the Education Committee

Dear Honorable Senators and Representatives;

My name is William Leahy and I am the Chief Operating Officer for the Institute for Sustainable Energy at Eastern Connecticut State University. The Institute, established in 2001, focuses on matters related to the formation of public policy, providing educational outreach, supporting energy solutions and maintaining information resources on energy and sustainability. The Institute provides an unbiased view of energy resources and practical solutions to improving the state's energy profile and to promote a more sustainable energy future for the Connecticut.

I would like to thank you for the opportunity to testify today. I would like to support the Green School provision included in **RB 7346, An Act Concerning Green School Buildings and the Gross Earning Tax on Diesel Fuel for School Buses.**

As you most likely know, legislation supporting green school standards has been debated frequently over the past three years, and this year there are at least two other bills being considered that propose the adoption of high performance building standards. The budgeting for any additional cost has typically been the issue.

First, I would like to state my support for your recommendation to include "schools" into Section 10-285a of the general statutes section 16a-38k addressing improvements to building standards for facilities built with state funding. I support the provision in the general statutes that applies this provision to both new construction and renovations. This initiative will help remedy some difficult situations created in the past and build a legacy of high quality buildings that will better serve our students and save taxpayers money into the future.

I wanted to remind you that the Institute was instrumental in two important studies supporting the use of high performance building design in Connecticut's schools. First, the Institute facilitated a study that engaged a group of thirty public education stakeholders and the CT Green Building Council to evaluate the use of High Performance Building Standards and life-cycle cost analysis in the design of new schools. Earlier this year we provided each of you with a copy of the findings from that study.

Office Building: 670-676 Main Street, Suite 410, Willimantic, CT 06226

Mailing Address: 83 Windham Street, Willimantic, CT 06226

Office: 860-465-0251.Fax: 860-465-0261

www.sustainenergy.org

The outcome was a clear endorsement of high performance building standards for the benefits that included:

- improving the educational setting so student achieve at higher levels,
- providing a healthier indoor environment for students and staff, reducing absenteeism and
- supporting cost effective investment for the community.

A copy of that study can be found on the Institute's website at:

<http://www.easternct.edu/depts/sustainenergy/HPSchoolSummary/HPSchools.htm>

In addition, at last summer's Energy Summit, I reported on a second study completed by the Institute with funding from the CT Clean Energy Fund, which evaluated the energy efficiency of Connecticut's existing schools. As I reported, I am also very concerned about the condition and tax burden created by the energy inefficiency of our existing schools.

- Connecticut school systems spent over \$124,000,000 on energy in 2004. Since 2004, most school systems have experienced a **50% increase in costs**, with a 40% to 50% increase in electric cost and 50% increase in heating costs. We estimate the 2005-6 energy cost to Connecticut's schools was over \$160,000,000, **and it will climb to over \$180,000,000 in 2006-7 the school year.**
- The Institute benchmarked 119 schools using actual billing data, and EPA's Energy Star Portfolio Manager software. On a scale of 1 to 100 where 75 or better would earn an Energy Star building award and 50 was at the national average, **the average score for Connecticut's schools was 26.** Our schools are among the least efficient in the country. If RB 7098 was passed and as a result Connecticut raised the efficiency of all our schools to 75, the Energy Star level, communities would **save \$69 to \$80 million annually.** If we only raised the schools to 50, the national average, communities would **save \$46 to \$60 million annually.**

Nearly every day this past winter Connecticut's newspapers report on local school boards having to reduce educational programs or extra curricular activities in order to pay unanticipated energy costs. With energy costs increasing, operating expenditures for existing buildings have reduced the quality of education for our children and have become a major financial burden on communities.

The full report on the energy efficiency of Connecticut's existing schools can be downloaded from the Institute's website at:

http://www.easternct.edu/depts/sustainenergy/HPSchoolSummary/ee_study_ct_schools.pdf

Conclusion: Connecticut needs to adopt high performance building standards for both new schools and renovations because our schools are in dire need of efficiency upgrades to break the cycle that is draining on our educational resources.

Office Building: 670-676 Main Street, Suite 410, Willimantic, CT 06226

Mailing Address: 83 Windham Street, Willimantic, CT 06226

Office: 860-465-0251.Fax: 860-465-0261

www.sustainenergy.org

In discussions with stakeholders, most of the concern come from a false perception that "Green Schools will cost more." **This is not necessarily true for two reasons:**

1. Over the 40 to 50 year life of the typical school, the community will save any initial increase in construction cost many times over with a 20% to 40% lower annual energy bill, in addition to lower maintenance costs, lower student and staff absenteeism, and lower incidents of indoor air quality health liability.
2. National studies have determined that in states that adopt HP school design standards, school projects had an initial increased project cost of 5% to 7% over code built school in the first years after legislation, but a market transformation reduced the incremental cost for HP building to 0% to 2% after just three years. State bonding for new schools should budget accordingly.
3. To verifying any additional cost for including Green features into schools, the process for designing a green building requires that all options be modeled using nationally recognized software (DOE 2) which estimates both their projected cost and projected savings. In addition, the building design and construction must be commissioned to make sure you got what you paid for and it works as it was supposed to. Therefore, the approval process for a Green building design is easier than for standard buildings because the analysis in the design phase is much more rigorous. In some locations where high performance standards are optional, Green buildings are given an accelerated approval process.

In a recent report titled "*Greening America's Schools, costs and benefits*" prepared by Gregory Kats, representing the American Federation of Teachers, the American Institute of Architects, American Lung Association, the Federation of American Scientists and the US Green Building Council, Greg quantifies the benefits of Green schools. His analysis calculates the benefits to the state, the community and the students. For the investment of an additional \$3.00 per square foot for a Green school, a net financial benefit of \$71 is achievable. I have attached a copy of this landmark report to my testimony today.

A copy can also be found on www.cap-e.com.

Thank you for this opportunity to support this important legislation. I encourage you to act on this bill as soon a possible.

Don't hesitate to contact me if you have any questions.

Sincerely

Bill Leahy

William M. Leahy. – Chief Operating Officer
Institute for Sustainable Energy
at Eastern Connecticut State University
(860) 465-0252
www.sustainenergy.org