HIGH PERFORMANCE SCHOOLS & PUBLIC BUILDINGS

Northeast Energy Efficiency Partnerships (NEEP) promotes the efficient use of energy in homes, buildings and industry in the Northeast U.S.

NEEP’s High Performance Schools and Public Buildings project takes a broad approach to energy efficiency in buildings by developing guidance for and providing access to best practices in overall design, construction, maintenance and operation of high performance buildings, i.e. energy efficient and sustainable, across the building sector. The High Performance Buildings project also works closely with the Building Energy Codes project at NEEP, to ensure that communities have the latest and most comprehensive suite of tools to maximize their energy efficiency.

Getting to Zero Net Energy
NEEP’s vision is that the work done today on high performance buildings will pave the way for the development of zero net energy buildings, buildings that consume no more energy than they produce, on a broader scale throughout the region.

High Performance Design Strategies for Public Schools and Beyond
NEEP’s work in the area of high performance buildings has evolved from the highly successful implementation of its High Performance Schools Exchange, which includes the development of the Northeast High Performance Schools Protocol (NE-CHPS). Today, more than 50 high performance schools have been constructed in the Northeast. NEEP will continue its focus on schools as a specific building type, but has broadened this regional project to provide policy and program guidance for high performance buildings across the building stock. For more information, visit http://neep.org/public-policy.

Guidance for Existing Public Buildings
NEEP is currently developing an Operations and Maintenance Guide for Public Buildings which will provide guidelines that will help improve the operational environment of any public facility. Improved O&M procedures will lead to healthier indoor air quality, improved staff comfort, lower energy bills, reduced water consumption, and improved environmental stewardship. The Guide will be available summer 2010.

Maximizing Efficiency: Building Codes vs. Rating Systems for Public Buildings
Compliance with building energy codes presents one of the most cost-effective ways to reduce building energy consumption in new construction and substantial building renovation. A “stretch” or “reach” energy code can give communities the option to attain even greater energy efficiency. Visit NEEP’s Buildings Energy Codes project to learn why implementing a “stretch” code may ensure greater energy savings than adopting a green building rating system. http://neep.org/public-policy/4/78/Building-Energy-Codes
Case Study: Zero Net Energy Public Buildings in Massachusetts

Massachusetts’ first zero net energy public building is currently under construction at North Shore Community College’s Danvers campus. The new 58,000-square-foot Health Professions and Student Services Building will demonstrate cost-saving, high-efficiency designs and on-site renewable energy use, as outlined in the final report of the state’s Zero Net Energy Buildings Task Force. The building will include on-site solar electricity and geothermal heating and cooling systems.

NEEP chaired the public buildings’ working group of the Governor’s Zero Net Energy Buildings Task Force, which worked to develop recommendations for reducing energy use and emissions in state and private buildings by 2030 and helped select the first demonstration projects. Their final report can be found here: http://www.mass.gov/Eoeea/docs/eea/press/publications/zneb_taskforce_report.pdf

Rendering of North Shore Community College’s Allied Health Building, Massachusetts’ first zero net energy public building. Image courtesy of DiMella Shaffer.

Providing education, information and technical resources:
NEEP serves as an information resource to policymakers, building professionals, energy efficiency stakeholders and other on best practices and standards in high performance buildings design and construction.

For more information on NEEP’s High Performance Schools and Public Buildings project please contact:

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