

To: BSA Legislative Affairs Committee, Codes Committee and Committee on the Environment

From: Mike Davis AIA, LEED and John Nunnari Assoc. AIA

Date: July 7, 2008

Re: Analysis: An Act Relative to Green Communities (S 2768, June 23, 2008)

First and foremost, it is important to remember that this legislation is about energy in the Commonwealth of Massachusetts: How it is produced, distributed and used. The Bill would be more accurately titled the “Energy Reform Act”, one of its prior names. It is, as promised by the Legislature, sweeping and far-reaching in its scope in regards to the electric and gas utilities. Although climate change is not mentioned specifically, it is clear that one of the intended results of this Act is to reduce the Commonwealth’s production of greenhouse gasses.

In that buildings are a major consumer of power, this Act will affect architecture and what we do as architects. In addition, the BSA can consider some provisions of this Act as public policy “wins”. We can also be satisfied that the provisions to which we most strenuously objected have been deleted. However, specific public incentives such as subsidies or tax credits for private sector “green building” are absent. It would be inaccurate to say that the Commonwealth does not consider buildings to be part of its overall climate change strategy, but buildings are a minor part of this legislation and mostly as they are further regulated, not incentivized.

Sections that are most applicable to the BSA and the practice of architecture in Massachusetts are summarized below:

Section 55 requires the Commonwealth to adopt the International **Energy Conservation Code** together with “any more stringent energy-efficiency provisions that the board, in consultation with the Department of Energy Resources, concludes are warranted” within one year of any revision to the base IECC. It also requires that building inspectors be trained in the IECC and **requires commissioning** of all energy-using building systems for all construction or renovation to non-residential buildings larger than 10,000 SF. Certification from a commissioning agent must be submitted prior to obtaining a Certificate of Occupancy. This section also charges the BBRS with preparing a report “in consultation with the department of energy resources, **professional organizations** and other stakeholders” evaluating the advisability of a requirement of periodic commissioning for large non-residential buildings. **The BSA should work to become part of this group.**

In addition, the language in a prior version of the bill that would have made the IECC a “specialized code” outside of the Building Code has been dropped.

Section 78 loosens regulatory constraints on **net metering** and allows for the creation of **neighborhood-scaled distributed generation facilities of up to 2 megawatts**. This important and far-reaching provision is intended to make on-site and building-integrated renewable energy generation more financially feasible, and may therefore indirectly give our clients greater access to subsidy funding from the Massachusetts Renewable Energy Trust.

Section 22, the **Green Communities Act** itself, is a program of grants and loans to municipalities that plan to develop their own strategies for greater energy efficiency or greenhouse gas reduction. The funding for these grants or loans (along with many of the other programs described in this Act) are intended to come from the State's auctioning of carbon credits within the rules of the Regional Greenhouse Gas Initiative and the formation of a Regional Greenhouse Gas Initiative Auction Trust (Section 3). The impact of this Act on buildings or sustainable design is potentially positive although ultimately diffuse as it depends upon public policy initiative in each of our 351 communities. **Notably absent from this section is the provision which would have allowed a municipality to adopt its own Building Code.**

Section 88 creates a commission to "examine the environmental and economic impact of establishing a **green building plan** for the Commonwealth". The first draft of this language did not name the BSA as part of this commission, the fact a representative from the Boston Society of Architects will be now included is a direct result of our lobbying efforts. This is one avenue for us to continue our advocacy for incentives.

Section 96 requires DCAM, with the DOER, to establish by July 1, 2009, a methodology for performing **Life Cycle Cost Analysis** on (one would assume) public buildings.

Section 2 requires the Commissioner of DCAMM to require any state agency initiating either new construction or renovation work, exceeding \$25,000, (including the replacement of systems, components or other building elements which affect energy or water consumption) to design/construct/renovate the facility in a manner that minimizes the life-cycle cost of the facility by utilizing energy efficiency, water conservation or renewable energy technologies. Also states that any new educational facility, including MSCBA projects, for which the projected demand for hot water exceeds 1,000 gallons per day or which operates a heated swimming pool, to be constructed (whenever economically and physically feasible) with a solar or other renewable energy system as the primary energy source for the domestic hot water system. All Higher Education projects shall incorporate, at a minimum, the MA-CHPS Green Schools Guidelines standards or an equivalent standard. **This information should be passed along to the BSA Educational Facilities Committee, and anyone/firm doing DCAMM work.**

Section 44 allows a State agency or local government, when working through the Division of Energy Resources on a project of \$100,000 or less, to contract directly with electric and gas utilities and other private providers for energy conservation or renewable energy projects. These contracts would be exempt from the Filed Sub Bid process.

Section 49 creates a **new governing Board** of the Massachusetts Renewable Energy Trust, chaired by the Commissioner of the DOER, and charges it with producing a five-year plan focused on the development of renewable energy. Although the MRET will still be housed within the Massachusetts Technology Collaborative, this move represents a compromise solution to a political debate about this semi-private agency and who should administer it. Language in an earlier proposed Section of this bill that would have allowed money to flow from this Trust to “green” or “high-performance” buildings regardless of the presence of on-site renewable energy was dropped.

Section 12 Creates within the EOEEA, a new department called the Department of Energy Resources. This department will have three (3) new divisions; Division of Energy Efficiency, Division of Renewable and Alternate Energy Development and Division of Green Communities. All three Divisions will promulgate regulations. **BSA should introduce themselves to both the new Commissioner and the three Divisions Directors to possibly help with the development of Department policy/regulation.**

Section 108 requires the Department of Energy Resources and UMASS Boston to establish an educational outreach pilot program regarding energy efficiency related goals. These short courses are designed for presentation to communities. **The BSA might consider helping to develop a course based on our specific area of expertise in the energy efficiency area.**

Several sections of the Act create new regulations or incentives that affect single-family homes:

Section 5 requires home inspectors to provide potential home buyers with information on the benefits and availability of **home energy audits**.

Section 84 creates a pilot “**Energy Pay & Save**” program, whereby homeowners would purchase energy efficiencies technologies or equipment from the utilities and pay for them over time as part of their utility bill, ostensibly at a net savings to the homeowners. An interesting idea, but the Act caps the pilot program at 200 participants and \$500 per residential customer.

Section 90 creates a new \$5M zero-interest loan program for financing building envelope or mechanical system improvements to single-family homes under last year’s HEAT Loan program.

Also of note, several sections of the legislation concern renewable portfolio standards. In an earlier draft of this bill, coal gasification was specifically included within the definition of renewable energy. That language has been dropped. Many sections of the Act focus on “Efficiency First Energy Procurement”, requiring utilities to consider all available energy sources when purchasing power and involving them in demand-side reduction measures.

Interestingly, as a wrap-up, the last Section of the Act lists goals for energy-use reduction. Included is a goal to reduce the use of fossil fuels by buildings (as opposed to reducing the use of fossil fuels to generate power for buildings) by 10% from 2007 levels by 2017. This section also charges the Secretary of Energy and Environmental affairs with producing (another) five-year plan for, among other things, “progress towards improving the efficiency of buildings and mechanical systems on an all-fuels basis including electric, gas and oil.” These aren’t particularly ambitious goals as compared to the AIA and US Congress of Mayor’s adoption of the 2030 Challenge.

The AIA recently released a report titled “Local leaders in Sustainability: Green Incentives” from which Boston and Massachusetts was notably absent. There is still a need for the BSA to advocate in support of public incentives for the private development of green buildings - including but not defined exclusively by energy efficiency. With the passage of the Green Communities Act, for all the positive things it will accomplish, the Legislature may be inclined to feel as if it has done its part on the subject.