

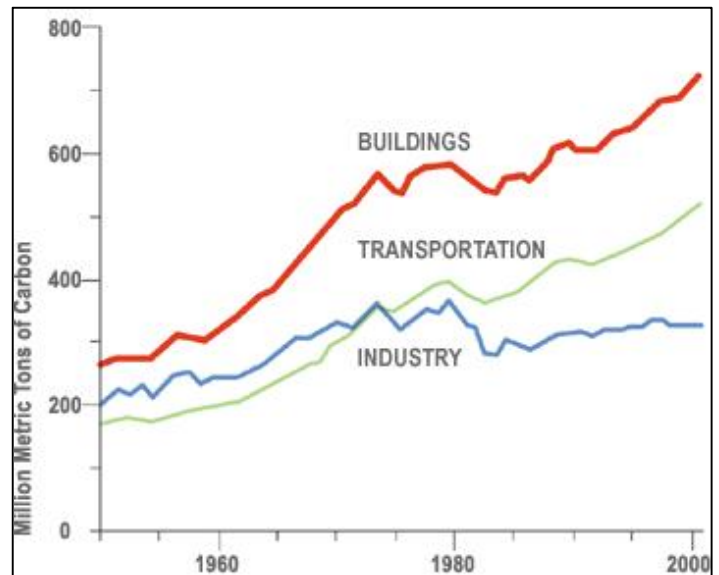


**Public Hearing on LD 1655
Committees on Utilities and Energy
May 2, 2007**

**Testimony of Dylan Voorhees
Energy Director
Natural Resources Council of Maine**

Senator Bartlett, Representative Bliss, Members of the Committee,

Thank you for allowing me to testify in support of LD 1655. The building sector in the United States is responsible for almost 50% of all energy consumption. This yields much more carbon emissions than transportation or industry (see chart). Nearly a quarter of all energy consumption is for the residential sector, which is the focus of this bill. We use most of this energy to provide heating, cooling and lighting—but we do so very inefficiently, thus harming our environment and our economy unnecessarily. Adopting better building codes is a measured response to this problem.



Each time we build a home (about 5000 per year) we lock in, for 50 or 100 years, an energy footprint. There may be retrofits that can be done later at some expense, but the basic functioning of the building is established. If that building is built to operate inefficiently, it will continue to consume higher amounts of electricity, natural gas and/or heating oil, driving up energy costs for all of us, for a generation. On the other hand, if we increase our building efficiency marginally—and this bill requires modest improvements—then individual owners will save money and we will *all* save money as we ease total demand for fossil fuels.

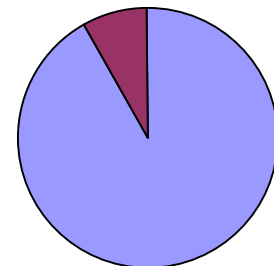
It is appropriate to ask: if efficient buildings save money, then why doesn't the market lead to more efficient buildings? There are several "market failures" at work in this area. Perhaps most importantly is the split incentive between the people who build buildings and the people who occupy them and pay ongoing energy costs. This split incentive is most stark when buildings are leased or rented, but is true when they are owner-occupied as well. The market puts pressure on builders to deliver the most inexpensively built home, but nobody is calculating the savings from efficiency measures like more efficient furnaces, or extra-thick insulation. One party builds, the other party operates.

Another market failure is that relatively few builders (or homeowners) are aware of energy efficiency building practices. This is changing, but too slowly. Over the next few decades, we will replace or renovate the vast majority of our buildings. If we fail to make a modest change today, then we will lose an opportunity to take the low-cost route.

This is a fundamental “tragedy of the commons”. Individual choices add up. When each of us chooses to forgo a slightly more efficient building because we don’t value the savings, the result is rapidly escalating demand for limited resources that we have to import from other countries. Spiking prices result and each of us pays the price. **Individuals can pursue more efficient buildings, but unless we do so collectively, the price effect remains.** We face this problem in other contexts and state and federal governments set minimum standards, rarely very aggressive, to address it. We have minimum standards for most appliances, for commercial buildings. Several states and countries are considering banning incandescent light bulbs. At a certain point, when it affects us all, society draws a limit around individual’s right to be wasteful.

The environmental impact of inefficient buildings is enormous. This includes the electricity; you have already heard about the negative effects of power plants not only on global warming, but in creating large amounts of toxics like mercury. But the impacts here extend well beyond electricity. Mainers consume millions of gallons of oil and gas every year to operate their homes. These fuels are combusted and vented right there, at thousands of locations across the state. Efficient buildings that minimize fuel use will contribute significantly to improved air quality.

We believe there is very strong public support for this kind of policy. Two surveys were just released this week. One from the New York Times found that huge margins of people support energy efficiency as a means to curb global warming and address energy costs. Closer to home, Congressman Tom Allen surveyed constituents on several policies. He asked “Do you support or oppose increased energy efficiency standards for buildings and appliances?” 92% were supportive.



These codes have worked well in other states and countries—in fact, far stricter codes have reduced energy consumption dramatically from buildings in most European countries. In Maine, the State Housing Authority uses these codes successfully. They are not radical, they are prudent. The bill also relieves municipalities of the burden of training and paying for additional code officers, giving homeowners the responsibility for certifying that their homes are not grossly inefficient. This is a welcome shift from centralization to a market-based approach to enforcement.

In conclusion I urge you to support this bill because it will yield significant positive effects for our environment and result in significant energy cost savings for Maine, today and long into the future.