



Heating and Cooling with Renewable Fuels

Massachusetts Senate Bill 1593 would add technologies that heat and cool using renewable resources to those eligible for the Alternative Energy Portfolio Standard under MGL c. 25A, Section 11F1/2. These technologies produce useful thermal energy using sunlight, biomass, bio-gas, bio-liquids and temperature differences in the ground and air. These sources of energy receive financial incentives when used to produce electricity under the state's Renewable Portfolio Standard, but do not when used to produce thermal energy.

Production of thermal energy with renewable fuels is given some form of energy credit by fifteen states. The two most recent additions occurred last year when both Maryland and New Hampshire enacted legislation awarding credits to such activities as heating water with sunlight, heating buildings with geothermal energy or wood pellets, blending heating oil with bio-diesel fuel or using biogas produced by anaerobic digesters and at landfills.

If enacted in Massachusetts, this law would reduce energy costs for customers and for utilities, spur local economic development, create jobs and reduce greenhouse gas emissions:

- **It will save money for consumers and utilities.**

Businesses and homes that install these technologies will reduce their energy costs, especially compared to the use of petroleum fuels. Utilities will have more sources from which to purchase their Alternative Energy credits. This will increase price competition and avoid the need for them to make expensive "alternative compliance payments" (ACPs) to the state. (In 2011, ACPs comprised 65% of the credits used for compliance with the Alternative Portfolio Standard at a cost in excess of \$12M.) These market corrections will reduce costs to electricity ratepayers.

- **It will spur in-state economic development.**

Installation, operation, fuel delivery and maintenance for these technologies are handled by local vendors. Expansion of their market participation will create jobs in Massachusetts and reduce the flow of energy expenditures out of the state and region.

- **It will reduce emissions of greenhouse gases and other pollutants.**

Replacing fossil fuels with clean, renewable fuels lowers the emission of greenhouse gases and other pollutants.

Despite these advantages, businesses and homeowners are hesitant to replace or duplicate existing heating and cooling systems that use fossil fuels. Renewable systems require up-front capital investments and compete with low prices for natural gas. Enactment of this legislation would help give consumers the economic incentive they need to switch to heating and cooling systems that partly or entirely use renewable fuels.

For more information, visit www.MassCleanHeatBill.org/