



MASSACHUSETTS MEDICAL SOCIETY

Every physician matters, each patient counts.

MMS Testimony In Support of House No. 4458, "An Act to Limit Carbon Dioxide Emissions from Renewable and Alternative Energy Sources"

Before the Joint Committee on Telecommunications, Utilities and Energy

February 25, 2010

The Massachusetts Medical Society believes that biomass combustion electricity generation plants pose an unacceptable public health risk, and urges the adoption of state policies that minimize the approval and construction of new biomass plants, remove government incentives for biomass combustion electricity generation plants, support renewable energy technologies with zero-pollutant emissions, and promote energy efficiency and conservation.

Biomass combustion plants emit carbon dioxide, which contributes to climate change and global warming. Climate change has global environmental and human health effects. For example, the increase in temperature related to global warming creates an environment for vector-borne diseases, such as malaria carried by mosquitoes, to distribute to more northern climates, including the northeastern United States.

However, biomass combustion creates other emissions in addition to CO₂ which would have more immediate health effects to the residents of Massachusetts. The burning of biomass releases small particles into the air creating particulate air pollution. Epidemiological studies have demonstrated an association between elevated particulate air pollution levels and adverse health effects and death. Particulate air pollution is associated with increased cardiopulmonary symptoms, asthma attacks, days lost from work due to respiratory disease, emergency room visits, hospitalization rates, and mortality.

Biomass combustion also releases nitrogen oxides, which help create ozone, a highly reactive oxidant gas. Ozone reacts in the pulmonary airways causing symptoms of chest pain, shortness of breath, cough, wheeze, increased susceptibility to infection, declines in lung function, increases in asthma attacks, increases in asthma medication use, increased rates of emergency room visits for respiratory disease.

The diesel vehicles which would harvest and transport the biomass for the plants, would create additional emissions, including carbon dioxides, nitrogen oxides, and diesel particulate matter, which is especially toxic.

The Massachusetts Medical Society supports House No. 4458 in that passage will minimize the construction of biomass combustion power plants in Massachusetts, and thereby protect the health of the citizens of the Commonwealth.