

# FROM SCIENCE TO POLICY: ADDRESSING HEALTH IMPACTS OF INSTITUTIONAL AND LARGE-SCALE WOODY BIOMASS BURNING

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**Background and aims:** Renewable energy credits, grants, and the low cost of wood have led to the proliferation of woody biomass electrical utility plants and institutional units to heat schools/universities and hospitals in the Northeast U.S. Potential health impacts of biomass burning are not systematically taken into account in energy policy decision-making. While “healthy renewable energy” is a goal shared by policy makers and the public, policy and practice changes are needed to achieve it. The objective of this project is to review the state of the science regarding health impacts from mid-sized biomass burning units as well policy gaps and opportunities for health-promoting energy policy decisions.

**Methods:** Literature reviews included a comprehensive search of the peer-reviewed literature, reviews of regulatory/permit policies and key informant interviews with air regulatory staff in nine Northeast U.S. states. Input and clarifying policy recommendations came from meetings with national health experts during Spring 2011. A policy symposium with leaders from energy, economic development, environment and public health agencies is scheduled later in the year to communicate key project findings and to begin a constructive dialog about policy solutions.

**Results:** Evidence of health risks to workers from the production of wood-chips, wood pellets and associated delivery, and community health impacts from diesel truck traffic and emissions from industrial and institutional wood-fired units will be presented. Preliminary policy opportunities identified include the adoption of health impact assessment during the permit process, and “Prevention through Design” policies that make available cleaner-burning technologies and safer workplaces. The case for stricter air permit regulations requiring emission controls on small institutional units will also be presented. Lessons-learned from meetings with experts and with policy leaders will be highlighted.

**Conclusions:** Health impacts of woody biomass burning have not been fully addressed to date. Scientific information can inform future policy decisions that will reduce public health risks.