



February 10, 2015

To: The Committee on Natural Resources and Energy
From: Richard Valentinetti, American Lung Association Volunteer
Subject: H.40

The American Lung Association in Vermont has urged your committee, the Senate Natural Resources and Energy Committee, the Biomass Energy Development Working Group, the Department of Public Service, and the Energy Generation Policy Siting Commission (EGPSC) to carefully consider the health impacts of energy policies, especially on our children, the elderly, and those living with chronic disease. As we have recommended in the past, this legislation should support **clean** renewable energy. There is a need to explicitly include clean energy, aka healthy, as not all renewable energy is inherently so.

The 2011 Comprehensive Energy Plan (CEP)¹ and the EGPSC's final report recognize the need to protect public health. The [CEP Appendix 2](#) describes public health impact assessments, noting, "public health assessments should be incorporated into the state's energy planning processes and policies, and when reviewing new and existing plants." The EGPSC's² [final report](#) includes a recommendation (24) that would require public health impact assessments in the siting process.

The American Lung Association recommends that you include language in H.40 that is consistent with the CEP and EGPSC's recommendations to implement public health impact assessments. We also recommend that you add "health" to the sentence on page 19, section II, line 18...including environmental, *health* and economic costs.

The health impact on Vermonters should clearly be in the equation as you calculate the life cycle costs of different forms of energy. Public health impact assessments can evaluate the potential public health and safety impacts of energy policy, and identify opportunities to maximize benefits and minimize risks.

The American Lung Association does not support biomass combustion for electricity. If biomass is used, it should be for combined heat and power. In the current draft of H.40, biomass plants are required to have an overall 50% design efficiency (page 30, section n, line 14). This standard appears low and does not represent a well-designed high-efficiency plant. The USEPA has identified under its Combined Heat and Power Partnership program that plants can achieve in excess of 75% overall efficiency³

Finally, according to the 2011 CEP, on-road motor vehicles are the largest source of many pollutants in Vermont, including particulate matter (PM), carbon monoxide, nitrogen oxide (NOx) and volatile organic compounds (VOCs). NOx and VOCs together form ozone which triggers asthma and causes

¹ 2011 Comprehensive Energy Plan, Vermont Department of Public Service, http://publicservice.vermont.gov/publications/energy_plan/2011_plan

² Energy Generation Siting Policy Commission Final Report, April 30, 2013
http://sitingcommission.vermont.gov/sites/cep/files/Siting_Commission/Publications/FinalReport/Final%20Report%20-%20Energy%20Generation%20Siting%20Policy%20Commission%2004-30-13.pdf

³ http://www.epa.gov/chp/documents/catalog_chptech_4.pdf (Table 4-2, page 4-10), September 2014.

premature death. Exposure to PM also triggers asthma, and increases the risk of heart disease and lung cancer. In an effort to reduce mobile source emissions, the American Lung Association supports the VTRANS recommended language to include “electric vehicle purchase incentive programs; transportation demand management programs,” under the definition of “Energy transformation project,” (page 6, section 25, line 12).

Thank you for the opportunity.