

# HOUSE BILL REPORT

## ESSB 5709

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**As Reported by House Committee On:**  
Environment  
Appropriations Subcommittee on Education

**Title:** An act relating to a pilot program to demonstrate the feasibility of using densified biomass to heat public schools.

**Brief Description:** Concerning a pilot program to demonstrate the feasibility of using densified biomass to heat public schools.

**Sponsors:** Senate Committee on Ways & Means (originally sponsored by Senators Smith, Ericksen, Sheldon, Holmquist Newbry, Dammeier, Brown and Roach).

**Brief History:**

**Committee Activity:**

Environment: 3/19/13, 3/20/13 [DP];

Appropriations Subcommittee on Education: 3/27/13, 4/4/13 [DPA].

**Brief Summary of Engrossed Substitute Bill  
(As Amended by Committee)**

- Directs the Washington State University Extension Energy Program to develop and initiate a pilot program to use densified biomass to heat two public schools meeting certain criteria, by December 1, 2013.
- Requires the Office of the Superintendent of Public Instruction to notify all school districts about the pilot and their opportunity to participate.

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### HOUSE COMMITTEE ON ENVIRONMENT

**Majority Report:** Do pass. Signed by 11 members: Representatives Upthegrove, Chair; McCoy, Vice Chair; Short, Ranking Minority Member; Pike, Assistant Ranking Minority Member; Farrell, Kagi, Lias, Morris, Nealey, Overstreet and Tharinger.

**Staff:** Jacob Lipson (786-7196).

**Background:**

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

Densified biomass, or wood pellets, is a heating product manufactured from condensed sawdust and chipped wood. Among other materials, densified biomass can be sourced from residual woody biomass from construction or forestry activities.

The Washington State University Extension Energy Program (WSU energy program) is a self-supported department within the university that provides research-based services and products for public, private, and nonprofit partner organizations. The 2012 Legislature appropriated a total of \$75,000 in supplemental operating budget to the WSU energy program to study densified biomass as a renewable fuel used for heating homes, businesses, and other facilities. As required by this appropriation, in December 2012 the WSU energy program submitted a preliminary report to the Legislature of its findings. The WSU Energy program report identifies certain carbon emission, forest health, waste diversion, and economic advantages to the use of densified biomass for energy, as well as identifies certain challenges, including those posed by both competition for woody biomass source materials and competition from other sources of energy.

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**Summary of Bill:**

By December 1, 2013, the WSU energy program is directed to develop and initiate a pilot program to demonstrate the feasibility of using densified biomass to heat public schools. The development of this pilot program is subject to the WSU energy program's receipt of federal and private funds for purposes of the pilot program. The WSU energy program may contract with other entities in order to implement the pilot program, and must submit a report to the Legislature by December 31, 2015, at the conclusion of the pilot program. The pilot program must include the following activities at two public schools:

- the replacement of a school's current heating system with a densified biomass heating system;
- the measurement and evaluation of the heating system, including a cost-comparison with conventional fuels; and
- the measurement of emissions from the heating system.

The two public schools chosen to participate in the pilot program must meet certain qualifying criteria. One school is to be selected based on the following factors:

- its proximity to a currently operating densified biomass manufacturer;
- the age and condition of the school's current heating system; and
- the similarity of the school's design to other schools of its class.

The second school must be located in a rural county bordering Hood Canal, the Olympic National Park, and southern Puget Sound.

The bill also makes certain findings related to the logistical, environmental, and economic advantages of using densified biomass as a heating source for schools and other buildings.

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**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) This pilot project will allow a demonstration of the large-scale viability of using wood pellets in nonresidential settings. This is a viable technology that is being used in other states, in Europe, and in Asia. This bill will support both jobs and public education. It will support jobs by reducing Washington's current practice of exporting wood shavings to other states to be turned into pellets, and instead support the development of an in-state pellet manufacturing industry and the market for locally produced slash from logging. It will support public education by saving school districts money in their heating costs, which school districts will be able to use for other priorities. Rural schools are good candidates to use pellets as a heating source, since they do not have access to natural gas, and propane and heating oil are expensive alternative heating sources. The emissions from wood pellet stoves are comparable to those of natural gas, and are cleaner than other wood sources because they have low moisture content and a large surface area.

(Neutral) Washington's neighboring states have much more maturely developed wood pellet industries than does Washington. This bill could help encourage the formation of additional wood pellet manufacturers beyond the two that are currently operational in Washington. Using byproducts from forest product processing is a win-win, because this is waste which would otherwise be thrown away and landfilled. Producing wood pellets helps makes the most use out of the trees that come out of the woods. The use of this organic material to support a revenue stream accords with current Department of Ecology initiatives.

(Opposed) None.

**Persons Testifying:** (In support) Senator Smith, prime sponsor; Rachael Jamison, Department of Natural Resources; and Gary Smith, Independent Business Association.

(Neutral) Sheila Riggs and Dave Sjoding, Washington State University Energy Program.

**Persons Signed In To Testify But Not Testifying:** None.

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**HOUSE COMMITTEE ON APPROPRIATIONS SUBCOMMITTEE ON EDUCATION**

**Majority Report:** Do pass as amended. Signed by 10 members: Representatives Haigh, Chair; Fagan, Ranking Minority Member; Carlyle, Dahlquist, Haler, Maxwell, Pettigrew, Seaquist, Sullivan and Wilcox.

**Staff:** Catrina Lucero (786-7192).

**Summary of Recommendation of Committee On Appropriations Subcommittee on Education Compared to Recommendation of Committee On Environment:**

Both schools are to be selected based on the same criteria. One school is to be located on the eastern side of the state and one school is to be located on the western half of the state. The Office of the Superintendent of Public Instruction must notify all school districts about the pilot and their opportunity to participate.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date of Amended Bill:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) The pilot project supports two key goals. First, it helps to begin capturing a currently wasted resource and second, it promotes a cost-efficient heating option. Washington produces a large quantity of timber by-products that are currently being exported to Oregon and other states where they are turned in to densified biomass (wood pellets) and then shipped back to Washington. This means that Washington is exporting jobs. Washington has the potential to produce densified biomass. Biomass is the only exportable renewable energy source. Washington should utilize state-sourced energy forms like this. Washington currently has two biomass manufacturing centers that produce about 100,000 tons, Oregon has six manufacturers that produce a combined total of about 250,000 tons, and British Columbia has 20 manufacturers that produce a combined total of about 2 million tons. Passing this bill would be a significant first step in expanding the biomass industry in Washington. This would have a positive impact on the economy and would create new jobs.

This is a cost-efficient energy form that could be used to heat rural schools that do not have good access to natural gas or other low-cost energy alternatives. Converting from fuel or propane heating to biomass could reduce heating costs by 50 to 70 percent for a school. These savings could be put back into the school for instructional purposes. The bill does not require any school to participate, but provides an opportunity for those that are interested.

There is a federal program that provides funds for research like this pilot project as well as some capital opportunities. The actual cost to the state should be minimal given this.

(Neutral) The Washington State University Energy Program has the capacity to conduct the research should the project move forward.

(Opposed) None.

**Persons Testifying:** (In support) Senator Smith, prime sponsor; Leah Hauer, Northwest Hearth Products Association; Daniel Henry, 5G3 Consulting; and Stan Elliott, Olympus Pellets.

(Neutral) Sheila Riggs, Washington State University Energy Program.

**Persons Signed In To Testify But Not Testifying:** None.