

HOUSE BILL REPORT

SB 5287

As Passed House - Amended:

April 11, 2023

Title: An act relating to a study on the recycling of wind turbine blades.

Brief Description: Concerning a study on the recycling of wind turbine blades.

Sponsors: Senators Wilson, J., Nguyen, Hasegawa, Lovelett, Lovick, Nobles, Schoesler and Wellman.

Brief History:

Committee Activity:

Environment & Energy: 3/14/23, 3/21/23 [DPA].

Floor Activity:

Passed House: 4/11/23, 97-0.

Brief Summary of Bill (As Amended by House)

- Requires the Washington State University Extension Energy Program to conduct a study on the feasibility of recycling wind turbine blades installed in facilities in Washington that generate electricity for customers in Washington.

HOUSE COMMITTEE ON ENVIRONMENT & ENERGY

Majority Report: Do pass as amended. Signed by 15 members: Representatives Doglio, Chair; Mena, Vice Chair; Dye, Ranking Minority Member; Ybarra, Assistant Ranking Minority Member; Abbarno, Barnard, Berry, Couture, Duerr, Fey, Goehner, Lekanoff, Ramel, Slatter and Street.

Staff: Robert Hatfield (786-7117).

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

Background:

According to the United States Energy Information Administration, wind power is the second-largest contributor to Washington's renewable electricity generation. As of 2021, the state had almost 3400 megawatts of wind-powered capacity. The state's largest wind farm, which came online in 2012, is along the Snake River in southeastern Washington and has a capacity of about 343 megawatts.

Wind turbine blades have an expected 20-year lifespan and are typically made of steel, plastic, and fiberglass materials. They vary in size, but a typical modern land-based wind turbine has blades over 170 feet.

Summary of Amended Bill:

The Washington State University Extension Energy Program must conduct a study on the feasibility of recycling wind turbine blades installed in facilities in Washington that generate electricity for customers in Washington.

The study must include information and recommendations on specified criteria such as:

- the cost, feasibility, and environmental impact of various disposal methods for wind turbine blades, including, but not limited to, options for reuse, repurposing, and recycling;
- considerations and options for the design of a state-managed product stewardship program; and
- the feasibility of including all wind turbine blades installed in Washington in a recycling program, including blades that are currently installed.

A report of findings must be submitted to the appropriate committees of the Legislature by December 1, 2023.

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 bill addresses the question of what to do with a wind turbine blade that is a minimum of 170 feet long and that has a lifespan of 20-30 years. More than 8,000 blades were taken out of commission across the country in 2021. Europe is ahead of the United States on this issue; there, blades are built with recyclable products.

This bill is a business opportunity for Washington. It would be good to have wind turbine blade recycling in Washington. Wind turbine blades are very large items. The wind farms in Washington were installed in 2004, which means it is getting close to the time that those blades will have to be replaced. Blades are made of fiberglass and wood and some other things. The European Union is recycling wind turbine blades. There is research underway on whether blades can be designed from the beginning of life to be readily recyclable. One of the solutions could be repurposing them, such as for a bridge.

There is support for this bill because it will aid in developing plans to address a growing issue. Wind turbine blades take up a colossal amount of space in landfills and cannot be compacted, no matter how much landfill employees jump up and down on them. Improper disposal of turbine blades can lead to air quality impacts.

Washington's solar panel take-back program was established in 2017 and has required periodic legislative intervention due to various challenges. Rather than move to legislation on recycling wind turbine blades, conducting a study first could help inform future legislation.

(Opposed) None.

Persons Testifying: Senator Jeff Wilson, prime sponsor; Heather Trim, Zero Waste Washington; Travis Dutton, Washington State Association of Counties; and Kate Brouns, Renewable Northwest.

Persons Signed In To Testify But Not Testifying: None.