Statement of Joe Hinson Licensed Professional Forester #765 Before the Senate Energy, Environment and Education Committee February 28, 2023

Re: SB 0590- Renewable Energy Portfolio Standard- Alterations (Reclaim Renewable Energy Act of 2023)

Chairman Feldman, Vice-Chair Kagan, and Members of the Committee,

I am Joe Hinson, licensed professional forester in Maryland. I have been a forester for over 50 years. I'd like to discuss the implications of a market for woody biomass renewable energy for forest management.

This is a section of an approximately 11-inch tree that is 25 years old. Each ring represents a year's growth. As you can see, the tree grew rapidly in its earliest years, adding about 0.8 inches in diameter each year. But about age 10, growth began to slow down as the crowns of neighboring trees closed in, limiting the available sunlight to each. Then, when the stand was 20 years old, foresters thinned it, removing about 30 percent of the trees, mostly those that were lower quality, suppressed and with no chance of becoming a more valuable tree for timber. After the thinning, the growth accelerated, adding wood and value plus storing carbon at a much higher rate.

This tree represents the component of a stand that is always present—same age but markedly smaller. It is 18 years old. It is about half the size of the larger tree when it was 18 years old. This is because this tree is for whatever reason genetically predisposed to grow more slowly so it could not compete with its larger neighbors in the stand. It's crown was small, it received little sunlight and has basically ceased to grow. Sooner rather than later, it will die and decompose, releasing the relatively small amount of carbon stored in it.

Finally, we have a tree 15 years old. It is 2 ½ inches in diameter and suppressed within a stand where its neighbors average about 9 inches in diameter. The growth rings are so narrow that they are hard to see. It, too, will die in the stand.

The latter two trees represent those that are removed during a thinning if there is a market for biomass energy. They will be chipped and used for that purpose. Energy from this source has value and there are no economically viable uses for wood from trees this size.

If we have a market for woody biomass energy, we have a use for the smaller trees we remove during a thinning operation. We can harvest these trees and increase and concentrate the growth of wood on the trees that can ultimately be made into higher value products.

Renewable energy credits add more value to even the smaller trees. For the forest products industry trucking is the biggest variable cost. There are areas of the state like lower Dorchester County that are so far from any mill that most logging, particularly for low value products is uneconomical, just because of the cost of trucking it to the closest mill. The value added to this wood from RECs allows us to range farther and complete thinning and other logging projects in stands of marginal economic value. These credits also open the door for commercial use of the vast amounts of waste wood piling up in urban areas for which there is no present market.

In short, RECs allow the economical use of wood for which there are no other markets. We have to take advantage of this opportunity.

Thank you.

