

JAN 20 2023

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# A BILL FOR AN ACT

RELATING TO RENEWABLE ENERGY.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The legislature finds that the rate and  
2 intensity of climate change is greater than predicted.  
3 According to remarks made by the Intergovernmental Panel on  
4 Climate Change in 2019, less than a decade remains to stop  
5 irreversible damage and avert catastrophe from climate change.

6           The legislature further finds that climate change is  
7 primarily caused by excessive greenhouse gasses in the  
8 atmosphere. The most prevalent greenhouse gas is carbon  
9 dioxide, which is emitted when trash, trees, coal, oil, or gas  
10 are burned. According to the National Aeronautics and Space  
11 Administration, once carbon dioxide is emitted, it stays in the  
12 atmosphere for three hundred to one thousand years. Steps taken  
13 now to reduce the emission of carbon dioxide will affect the  
14 livability of the planet for generations.

15           The legislature further finds that twenty years ago, the  
16 legislature established the State's renewable portfolio  
17 standards model to ensure that the State's electric utility



1 companies transition from using fossil fuels to renewable  
2 energy. At the time, biomass was considered a carbon neutral  
3 energy source. However, recent data show that not to be true.

4 The legislature further finds that much of the biomass used  
5 to generate electricity is wood in the form of trees or products  
6 made from trees. Trees sequester carbon dioxide, and the  
7 burning of trees and tree products releases carbon dioxide that  
8 would have otherwise been sequestered. Regrowing trees takes  
9 decades, and for this extended period, carbon dioxide that was  
10 released stays in the atmosphere.

11 The legislature further finds that burning wood emits fifty  
12 per cent more carbon on a per-unit-of-energy basis than burning  
13 coal. Despite claims of sustainability, the biomass energy  
14 industry is clearcutting forests that would otherwise be  
15 extracting carbon dioxide from the atmosphere. The United  
16 States is one of the largest suppliers of the twenty-two million  
17 tons of wood pellets consumed by the European Union each year.  
18 Communities in Virginia, Mississippi, and North Carolina are  
19 battling to protect forests from being fuel farms for European  
20 biomass burners.



1           The legislature further finds that there is presently no  
2 requirement that forests cut down for biomass energy will be  
3 allowed to regrow instead of being cut again and again, or that  
4 the land will not be developed for other uses. In short, there  
5 is no guarantee that new forests will be allowed to grow large  
6 enough to sequester as much carbon as the older, complex,  
7 carbon-rich forests that were cut.

8           The legislature further finds that the biomass industry has  
9 doubled in the last decade and is expected to expand by two  
10 hundred fifty per cent in the next ten years. This expansion  
11 would be a disaster for ecosystems upon which humans and animals  
12 depend, and it is grossly inconsistent with the goals of the  
13 Paris Climate Agreement.

14           The legislature further finds that intact forests are a  
15 vital part of the climate solution because they sequester carbon  
16 dioxide from the atmosphere and provide long term natural  
17 storage. Instead of cutting this valuable natural resource,  
18 forests should be protected and allowed to sequester carbon, be  
19 a habitat for wildlife, and provide space for recreation, clean  
20 air, and water.



1           The legislature further finds that waste incineration is  
2 the most expensive and polluting way to manage waste or make  
3 energy. For the same energy output, trash incineration produces  
4 seventy per cent more pollution than burning coal. Compared to  
5 landfilling, trash burning releases twice as much carbon  
6 pollution and is far more polluting generally. Subsidizing the  
7 burning of waste and labeling it as renewable energy puts source  
8 reduction, reuse, recycling, and composting at a competitive  
9 disadvantage, and further encourages biomass burners to switch  
10 to burning waste, which they can be paid to take.

11           The legislature further finds that, pursuant to section  
12 225P-5, Hawaii Revised Statutes, the State has established a  
13 statewide target to sequester more atmospheric carbon and  
14 greenhouse gasses than emitted within the State as quickly as  
15 practicable, but no later than 2045. In order to meet this  
16 target, utilities in the State should be required to meet their  
17 renewable portfolio standards obligations using only clean  
18 renewable energy sources, and excluding biomass and waste  
19 incineration.



1           Accordingly, the purpose of this Act is to remove biomass  
2 from the renewable portfolio standards definition of renewable  
3 energy.

4           SECTION 2. Section 269-91, Hawaii Revised Statutes, is  
5 amended by amending the definition of "renewable energy" to read  
6 as follows:

7           "Renewable energy" means energy generated or produced  
8 using the following sources:

- 9           (1) Wind;
- 10          (2) The sun;
- 11          (3) Falling water;
- 12          (4) Biogas, including landfill and sewage-based digester  
13             gas;
- 14          (5) Geothermal;
- 15          (6) Ocean water, currents, and waves, including ocean  
16             thermal energy conversion;
- 17          ~~[(7) Biomass, including biomass crops, agricultural and~~  
18             ~~animal residues and wastes, and municipal solid waste~~  
19             ~~and other solid waste;~~
- 20          ~~+(8)]~~ (7) Biofuels; and
- 21          ~~+(9)]~~ (8) Hydrogen produced from renewable energy sources."



# S.B. NO. 424

1 SECTION 3. Statutory material to be repealed is bracketed  
2 and stricken. New statutory material is underscored.

3 SECTION 4. This Act shall take effect upon its approval.

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INTRODUCED BY: *Mike Hubbard*



# S.B. NO. 424

**Report Title:**

Renewable Portfolio Standards; Renewable Energy; Definition;  
Biomass

**Description:**

Removes biomass from the renewable portfolio standard definition of renewable energy.

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