

JAN 17 2025

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 electricity rates
2 are a significant component of household budgets and should be
3 reduced where feasible. In recent years, the costs of
4 electricity from alternative energy sources, such as solar and
5 wind power (backed up by battery and other means of storage),
6 have dropped below the costs of power from most existing power
7 plants fueled by fossil fuels (i.e. coal, oil, or natural gas),
8 wood, or trash. For example, the Kauai Island Utility
9 Cooperative's Lawai Solar and Energy Storage Project averages a
10 cost of eleven cents per kilowatt hour, far below the cost of
11 biomass plants. With improved battery and storage technologies,
12 alternative renewable sources can be just as reliable as power
13 plants that burn wood, trash, or fossil fuels.

14 In addition, the existing power plants that burn fossil
15 fuels, wood, or trash are major contributors to climate change.
16 Climate change is caused by excessive greenhouse gases in the
17 atmosphere. The most prevalent greenhouse gas is carbon



1 dioxide, which is emitted when trash, trees, coal, oil, or gas,
2 are burned. According to the National Aeronautics and Space
3 Administration, once carbon dioxide is emitted, it stays in the
4 atmosphere for three hundred to one thousand years. Actions
5 taken now to reduce the emission of carbon dioxide will affect
6 the livability of the planet for generations.

7 Recent data show that the rate and intensity of climate
8 change is greater than predicted. The years from 2013 to 2021
9 all rank among the ten warmest years on record, according to the
10 National Oceanic and Atmospheric Administration's National
11 Centers for Environmental Information.

12 Twenty years ago, the legislature established the State's
13 renewable portfolio standards model to ensure that Hawaii's
14 electric utility companies transition from using fossil fuels to
15 renewable energy. At the time, biomass was considered a "carbon
16 neutral" energy source. Two major sources of biomass combustion
17 are the burning of trees and the burning of waste.

18 However, burning trees will only contribute to climate
19 change for at least the next several decades or longer. Trees
20 remove greenhouse gases from the atmosphere and mature trees
21 remove more carbon than saplings. Moreover, it can take decades



1 for trees to grow into mature trees. Burning trees is fifty per
2 cent worse for the climate than burning coal because wood is a
3 less energy-dense fuel, and much more must be burned to get the
4 same amount of energy.

5 Waste incineration is the most expensive and polluting way
6 to manage waste or generate energy. For the same energy output,
7 trash incineration releases sixty-five per cent more carbon
8 dioxide than burning coal. Compared to landfilling, trash
9 burning releases significantly more carbon pollution and is far
10 more polluting generally.

11 To reduce both electricity rates and greenhouse gases, the
12 State should immediately disincentivize expensive and polluting
13 biomass incineration by eliminating biomass from the renewable
14 portfolio standard.

15 Accordingly, the purpose of this Act is to remove biomass
16 from the renewable portfolio standard definition of "renewable
17 energy".

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



1 ""Renewable energy" means energy generated or produced
2 using the following sources:

3 (1) Wind;

4 (2) The sun;

5 (3) Falling water;

6 (4) Biogas, including landfill and sewage-based digester
7 gas;

8 (5) Geothermal;

9 (6) Ocean water, currents, and waves, including ocean
10 thermal energy conversion;

11 ~~[-(7) Biomass, including biomass crops, agricultural and~~
12 ~~animal residues and wastes, and municipal solid waste~~
13 ~~and other solid waste;~~

14 ~~-(8)]~~ (7) Biofuels; and

15 ~~[-(9)]~~ (8) Hydrogen produced from renewable energy sources."

16 SECTION 3. Statutory material to be repealed is bracketed
17 and stricken. New statutory material is underscored.

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

19
INTRODUCED BY:





S.B. NO. 680

Report Title:

Renewable Portfolio Standards; Definition; Biomass; Repeal

Description:

Repeals biomass from the renewable portfolio standard definition of "renewable energy".

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