
A BILL FOR AN ACT

RELATING TO CLEAN ENERGY STANDARDS.

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

1 SECTION 1. The legislature finds that changing Hawaii's
2 renewable portfolio standard to a clean energy standard will
3 enable Hawaii to achieve greater reductions in its electricity
4 sector greenhouse gas emissions at a lower cost.

5 Hawaii has embarked on an ambitious goal to promote
6 renewable energy in the electricity sector in an effort to
7 reduce Hawaii's dependence on oil and reduce its greenhouse gas
8 emissions. However, Hawaii's chosen policy mechanism, the
9 renewable portfolio standard, is less economically efficient
10 than a clean energy standard and it does not differentiate
11 between different types of renewable energy.

12 A clean energy standard that prioritizes electricity
13 technologies based on lifecycle greenhouse gas emissions
14 considers the total greenhouse gas emissions involved in
15 producing and using energy and gives credit to technologies and
16 fuels for electricity based on their total emissions. For
17 example, the clean energy standard considers all of the
18 emissions involved in using oil for energy which include the



1 energy of extracting, refining, transporting, and burning oil.
2 Similarly, the clean energy standard differentiates between
3 responsibly sourced biofuel and biofuel produced on lands
4 degraded for farming.

5 A clean energy standard that prioritizes electricity
6 technologies based on lifecycle greenhouse gas emissions is
7 estimated to be up to ninety per cent more cost effective in
8 achieving clean energy goals than the current renewable
9 portfolio standard. This is because a lifecycle green house gas
10 emissions-weighted clean energy standard provides guidance over
11 the whole suite of possible technologies and fuels and
12 encourages generation efficiencies. The clean energy standard
13 also allows for partial credit for nonrenewable energies, scaled
14 to the worst greenhouse gas emitter.

15 To date, energy efficiency for electricity has only
16 targeted demand-side efficiency through the renewable portfolio
17 standard; the clean energy standard also promotes supply-side
18 efficiency. Under the clean energy standard, the level of
19 credit varies with the efficiency of the production unit.
20 Therefore, an electric utility can increase the clean energy
21 standard credit its oil-fired or biofuel units receive by
22 improving the efficiency of the units. This offers electricity



1 generators more flexibility in compliance and thus reduces
2 regulatory costs.

3 A clean energy standard is a more effective policy
4 mechanism to promote and deploy clean sources of electricity and
5 to reduce greenhouse gas emissions because it provides guidance
6 on both renewable and fossil-based fuels. Moreover, the clean
7 energy standard is an emerging concept in United States energy
8 policy. In his 2011 state of the union address, President Obama
9 called for generating eighty per cent of the country's
10 electricity by clean sources by the year 2035. Since then,
11 although a number of bills promoting the use of clean energy
12 standards have been introduced at the federal level, states,
13 rather than the federal government, have led the way in United
14 States energy policy. This Act calls for Hawaii to again be a
15 leader in clean energy in the United States by adopting a clean
16 energy standard. Accordingly, the purpose of this Act is to
17 change Hawaii's renewable portfolio standard to a clean energy
18 standard in the years 2020 and beyond. This will enable Hawaii
19 to achieve greater reductions in its electricity sector
20 greenhouse gas emissions at a lower cost.



1 SECTION 2. Section 269-91, Hawaii Revised Statutes, is
2 amended by adding a new definition to be appropriately inserted
3 and to read as follows:

4 "Clean energy standard" means an energy credit scale that
5 provides renewable energy credits based upon lifecycle
6 greenhouse gas emissions for each type of energy source
7 including non-renewable energy where the energy source emitting
8 the most greenhouse gases is set at zero."

9 SECTION 3. Section 269-92, Hawaii Revised Statutes, is
10 amended by amending subsections (a) and (b) to read as follows:

11 "(a) Each electric utility company that sells electricity
12 for consumption in the State shall establish a renewable
13 portfolio standard of[+

14 ~~(1) Ten]~~ ten per cent of its net electricity sales by
15 December 31, 2010; and

16 ~~[(2) Fifteen]~~ fifteen per cent of its net electricity sales
17 by December 31, 2015[+].

18 Effective January 1, 2020, in lieu of the renewable
19 portfolio standard, each electric utility company that sells



1 electricity in the State shall establish a clean energy standard
2 of

3 [~~3~~ ~~Twenty five~~] _____ per cent of its net
4 electricity sales by December 31, 2020; and
5 [~~4~~ ~~Forty~~] _____ per cent of its net electricity
6 sales by December 31, 2030.

7 (b) The public utilities commission may establish
8 standards for each utility that prescribe what portion of the
9 renewable portfolio or the clean energy standards, as the case
10 may be, shall be met by specific types of [~~renewable~~] energy
11 [~~resources~~] sources based on their lifecycle greenhouse gas
12 emissions; provided that:

13 (1) Prior to January 1, 2015, at least [~~fifty~~] _____
14 per cent of the renewable portfolio standards shall be
15 met by electrical energy generated using renewable
16 energy as the source, and after December 31, 2014, the
17 entire renewable portfolio standard shall be met by
18 electrical generation from renewable energy sources;

19 (2) Beginning January 1, 2015, electrical energy savings
20 shall not count toward renewable energy portfolio
21 standards[+] or clean energy standards, as the case
22 may be;



1 (3) Where electrical energy is generated or displaced by a
 2 combination of renewable and nonrenewable means, the
 3 proportion attributable to the renewable means shall
 4 be credited as renewable energy; and

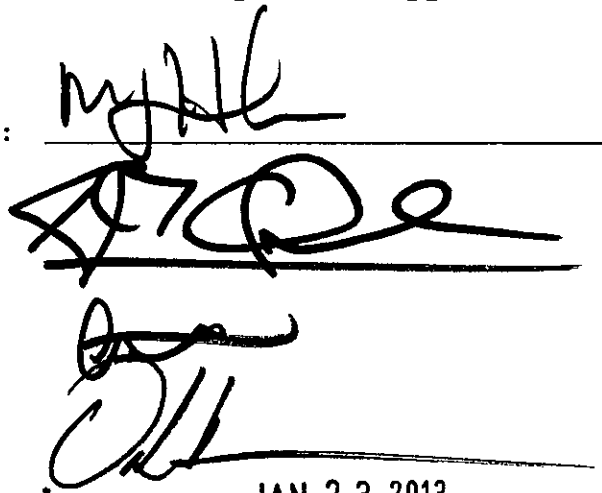
5 (4) Where fossil and renewable fuels are co-fired in the
 6 same generating unit, the unit shall be considered to
 7 generate renewable electrical energy (electricity) in
 8 direct proportion to the percentage of the total heat
 9 input value represented by the heat input value of the
 10 renewable fuels.

11 In its integrated resource planning, the electric utility shall
 12 meet the standards established by the public utilities
 13 commission, pursuant to this subsection."

14 SECTION 4. Statutory material to be repealed is bracketed
 15 and stricken. New statutory material is underscored.

16 SECTION 5. This Act shall take effect upon its approval.
 17

INTRODUCED BY:


H.B. NO. 1107

Report Title:

Renewable Energy; Clean Energy Standard

Description:

Amends Hawaii's renewable portfolio standard by changing the renewable energy portfolio standard to a clean energy standard to enable Hawaii to achieve greater reductions in its electricity sector greenhouse gas emissions at a lower cost.

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