

---

---

# A BILL FOR AN ACT

RELATING TO HYDROFLUOROCARBONS.

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

1           SECTION 1. The legislature finds that hydrofluorocarbons,  
2 or HFCs, are synthetic gases that pose a significant risk to our  
3 environment and therefore should be phased out and replaced with  
4 available alternatives that are safer and more cost-effective.  
5 Hydrofluorocarbons are greenhouse gases that are hundreds to  
6 thousands of times more potent than carbon dioxide in  
7 contributing to climate change. If left unchecked,  
8 hydrofluorocarbon emissions will increase to seven to nineteen  
9 per cent of global greenhouse gas emissions by 2050.  
10 Hydrofluorocarbons are widely used as cooling agents in air  
11 conditioners and refrigerators and in aerosol propellants,  
12 solvents, and foaming agents. These gases enter the environment  
13 through the manufacture, leakage, and disposal of these  
14 products.

15           Prior to the use of hydrofluorocarbons, chlorofluorocarbons  
16 or CFCs, were used for these applications. Beginning in 1987,  
17 chlorofluorocarbons were globally phased out by the Montreal



1 Protocol due to the role of these gases in ozone depletion.  
2 Hawaii banned the sale and release of chlorofluorocarbons  
3 through Act 77, Session Laws of Hawaii 1989; Act 316, Session  
4 Laws of Hawaii 1990; and Act 264, Session Laws of Hawaii 1992;  
5 however, hydrofluorocarbons were not included in these  
6 prohibitions.

7 Now, following nearly three decades of widespread use,  
8 there is an increased awareness of the significant impacts that  
9 hydrofluorocarbons have on climate change. While  
10 hydrofluorocarbons do not deplete ozone like  
11 chlorofluorocarbons, they are long-lived and have more than a  
12 thousand times more warming potential than carbon dioxide.  
13 Given this understanding, there has been action nationally and  
14 internationally to phase out the use of hydrofluorocarbons.  
15 California, Vermont, and Washington have passed legislation to  
16 replace hydrofluorocarbons with safer alternatives, and the  
17 Kigali Amendment to the Montreal Protocol provides a framework  
18 to transition from hydrofluorocarbons to substances having low  
19 to zero global warming potential.

20 Given Hawaii's efforts to reduce greenhouse gas emissions  
21 and mitigate the effects of climate change, the phase-out of



1 hydrofluorocarbons aligns with many existing goals and  
2 priorities. This is especially important now because federal  
3 action to address hydrofluorocarbons has stalled. Although the  
4 United States Environmental Protection Agency, recognizing the  
5 impacts of hydrofluorocarbons on climate change, previously  
6 implemented a rule under the Clean Air Act that imposed stricter  
7 requirements on hydrofluorocarbons emission monitoring and  
8 disposal, the agency subsequently proposed a reversal of this  
9 rule, thereby jeopardizing the increased regulation of  
10 hydrofluorocarbons at the federal level.

11 In the absence of federal action, states must provide  
12 leadership by addressing hydrofluorocarbons now because the  
13 impacts of climate change will not wait for federal law to  
14 regulate these harmful emissions. The legislature finds that  
15 substituting or reducing the use of hydrofluorocarbons with the  
16 highest global warming potential will provide a significant  
17 boost to the State's efforts to reduce its greenhouse gas  
18 emissions to established limits. The legislature also finds  
19 that hydrofluorocarbons will be comparatively easy to reduce and  
20 eliminate without widespread detriment to industry consumers.



1 While phasing out hydrofluorocarbons is essential to  
2 reducing greenhouse gas emissions, disposal of  
3 hydrofluorocarbons currently in use is also a necessary  
4 consideration. Because the State does not regulate  
5 hydrofluorocarbons in the same way that it regulates  
6 chlorofluorocarbons, there are currently no standards addressing  
7 the disposal of products containing hydrofluorocarbons.  
8 However, hydrofluorocarbons are recyclable and it is estimated  
9 that if thirty per cent of hydrofluorocarbons currently in use  
10 globally were recycled, approximately eighteen billion metric  
11 tons of carbon dioxide-equivalent emissions would be prevented  
12 over the next twenty-five years.

13 The purpose of this Act is to:

- 14 (1) Preserve federal regulations on the use of  
15 hydrofluorocarbons in state law;
- 16 (2) Establish a preference for products that do not  
17 contain hydrofluorocarbons in the state procurement  
18 code; and
- 19 (3) Direct the Hawaii state energy office and the  
20 environmental management division of the department of  
21 health to study how to increase the use of



1 refrigerants with low global warming potential and  
2 recommend how to establish a state program that  
3 supports the elimination of legacy uses of  
4 hydrofluorocarbons.

5 SECTION 2. Chapter 342B, Hawaii Revised Statutes, is  
6 amended by adding a new part to be appropriately designated and  
7 to read as follows:

8 "PART . REGULATION OF HYDROFLUOROCARBONS

9 §342B-A Definitions. As used in this part, unless the  
10 context otherwise requires:

11 "Class I substance" and "class II substance" mean those  
12 substances listed in title 42 United States Code section 7671a,  
13 as it read on November 15, 1990, and appendix A or B of subpart A  
14 of title 40 Code of Federal Regulations part 82, as those read  
15 on January 3, 2017.

16 "Hydrofluorocarbon" means a class of greenhouse gases that  
17 are saturated organic compounds containing hydrogen, fluorine,  
18 and carbon.

19 "Residential consumer refrigeration product" has the same  
20 meaning as in section 430.2 of subpart A of title 10 Code of  
21 Federal Regulations part 430.



1 "Retrofit" has the same meaning as in section 152 of  
2 subpart F of 40 Code of Federal Regulations part 82, as that  
3 section existed as of January 3, 2017.

4 "Substitute" means a chemical, product, or alternative  
5 manufacturing process, whether new or retrofit, that is used to  
6 perform a function previously performed by a class I substance or  
7 class II substance and any substitute subsequently adopted to  
8 perform that function, including hydrofluorocarbons, as set forth  
9 in appendix U or V, subpart G of title 40 Code of Federal  
10 Regulations part 82, as those read on January 3, 2017.

11 **§342B-B Regulation of hydrofluorocarbons.** (a) A person  
12 may not offer any product or equipment for sale, lease, or rent,  
13 or install or otherwise cause any equipment or product to enter  
14 into commerce in the State if that equipment or product consists  
15 of, uses, or will use a substitute for the applications or end  
16 uses restricted by appendix U or V, as those read on January 3,  
17 2017, and consistent with the dates established in subsection  
18 (d).

19 (b) Except where existing equipment is retrofit, nothing  
20 in this subsection requires a person that acquired a restricted  
21 product or equipment prior to an effective date of the



1 restriction in subsection (d) to cease use of that product or  
2 equipment.

3 (c) Products or equipment manufactured prior to an  
4 applicable effective date of the restrictions in subsection (d)  
5 may be sold, imported, exported, distributed, installed, and used  
6 after the specified effective date.

7 (d) The restrictions under subsection (a) shall take effect  
8 beginning:

9 (1) January 1, 2021, for:

10 (A) Propellants;

11 (B) Rigid polyurethane applications and spray foam,  
12 flexible polyurethane, integral skin  
13 polyurethane, flexible polyurethane foam,  
14 polystyrene extruded sheet, polyolefin, phenolic  
15 insulation board and bunstock; and

16 (C) Supermarket systems, remote condensing units, and  
17 stand-alone units;

18 (2) January 1, 2022, for:

19 (A) Refrigerated food processing and dispensing  
20 equipment;



- 1 (B) Compact residential consumer refrigeration  
2 products;
- 3 (C) Polystyrene extruded boardstock and billet, and  
4 rigid polyurethane low-pressure two component-  
5 spray foam; and
- 6 (D) Vending machines;
- 7 (3) January 1, 2023, for residential consumer  
8 refrigeration products other than compact and built-in  
9 residential consumer refrigeration products;
- 10 (4) January 1, 2023, for cold storage warehouses;
- 11 (5) January 1, 2024, for built-in residential consumer  
12 refrigeration products, centrifugal chillers, and  
13 positive displacement chillers; and
- 14 (6) On either July 1, 2022, or the effective date of the  
15 restrictions identified in appendix U or V, subpart G  
16 of title 40 Code of Federal Regulations part 82, as  
17 those read on January 3, 2017, whichever comes later,  
18 for all other applications and end uses for substitutes  
19 not covered by the categories listed in paragraphs (1)  
20 through (5).





1 (e) The department may adopt rules that include any of the  
2 following:

3 (1) The modification of the date of a prohibition  
4 established pursuant to subsection (d) if the director  
5 determines that the modified deadline meets both of the  
6 following criteria:

7 (A) Reduces the overall risk to human health or the  
8 environment; and

9 (B) Reflects the earliest date that a substitute is  
10 currently or potentially available;

11 (2) The prohibition on the use of any substitute if the  
12 department determines that the prohibition meets both  
13 of the following criteria:

14 (A) Reduces the overall risk to human health or the  
15 environment; and

16 (B) A lower-risk substitute is currently or  
17 potentially available;

18 (3) The creation of a list of approved substitutes, use  
19 conditions, or use limits, if any, and the addition or  
20 removal of substitutes, use conditions, or use limits  
21 to or from the list of approved substitutes if the



1 director determines those substitutes reduce the  
2 overall risk to human health and the environment; and  
3 (4) The creation of a list of exemptions from this section  
4 for medical uses of hydrofluorocarbons.

5 (f) If the United States Environmental Protection Agency  
6 approves a previously prohibited hydrofluorocarbon blend with a  
7 global warming potential of seven hundred fifty or less for foam  
8 blowing of polystyrene extruded boardstock and billet and rigid  
9 polyurethane low-pressure two-component spray foam pursuant to  
10 the Significant New Alternatives Policy Program under section  
11 7671(k) of the federal Clean Air Act, title 42 United States  
12 Code, section 7401 et seq., the Secretary shall expeditiously  
13 propose a rule to conform to the requirements established under  
14 this section with that federal action.

15 **§342B-C Aircraft maintenance; definition.** For the  
16 purposes of implementing the restrictions specified in  
17 appendix U of subpart G of title 40 Code of Federal Regulations  
18 part 82, as it read on January 3, 2017, consistent with this  
19 section, the department shall interpret the term "aircraft  
20 maintenance" to mean activities to support the production,  
21 fabrication, manufacture, rework, inspection, maintenance,



1 overhaul, or repair of commercial, civil, or military aircraft,  
2 aircraft parts, aerospace vehicles, or aerospace components.

3       **§342B-D Authority to regulate supplementary.** The  
4 authority granted by this part to the department to restrict the  
5 use of substitutes shall be supplementary to the department's  
6 authority to control air pollution pursuant to this chapter.  
7 Nothing in this part shall be construed to limit any authority  
8 granted to the department under any other law.

9       **§342B-E Use of commercial refrigeration equipment after**  
10 **effective date of restrictions.** Except where existing equipment  
11 is retrofit, the restrictions of this part shall not apply to or  
12 limit any use of commercial refrigeration equipment that was  
13 installed or placed in use prior to the effective date of the  
14 restrictions established in this part.

15       **§342B-F Penalties.** (a) The department may fine any  
16 person not more than \$25,000 per day for each violation of any  
17 provision of this part or any rule adopted under this part. The  
18 director may also impose an administrative penalty of not more  
19 than \$25,000 per day for each violation of any provision of this  
20 part or any rule adopted under this part. Each day of each



1 violation shall constitute a separate offense for the purpose of  
2 calculating the fine or penalty.

3 (b) Any person who fails to comply with an order issued  
4 pursuant to this part shall be fined not more than \$25,000 for  
5 each day of continued noncompliance.

6 (c) A fine or administrative penalty incurred but not paid  
7 shall accrue interest, beginning on the ninety-first day  
8 following the date the penalty became due, at the highest rate  
9 allowed under chapter 478. If a fine or administrative penalty  
10 is appealed, interest shall not begin to accrue until the  
11 thirty-first day following the date of the final resolution of  
12 the appeal.

13 (d) The maximum penalty amount established by subsection  
14 (a) may be increased annually to adjust for inflation, as  
15 calculated by the consumer price index or other acceptable  
16 adjustment mechanism as determined by the rule.

17 (e) All fines collected under this section shall be  
18 deposited in the environmental response revolving fund  
19 established by section 128D-2.

20 (f) A public or private entity that receives or is the  
21 potential recipient of a grant from the department may have the



1 grant rescinded or withheld by the department for failure to  
2 comply with the provisions of this part.

3 (g) In addition to other penalties provided by this part  
4 or by a rule adopted pursuant to this part, any person who  
5 knowingly underreports emissions or other information used to  
6 set fees, or persons who are required to pay emission or permit  
7 fees who are more than ninety days late with regard to the  
8 payment, may be subject to a penalty equal to three times the  
9 amount of the original fee owed.

10 (h) The department shall adopt rules to excuse excess  
11 emissions from enforcement action if the emissions are  
12 unavoidable. The rules shall specify the criteria and  
13 procedures for the department and local air authorities to  
14 determine whether a period of excess emissions is excusable in  
15 accordance with the state implementation plan."

16 SECTION 3. Chapter 103D, Hawaii Revised Statutes, is  
17 amended by adding a new section to part X to be appropriately  
18 designated and to read as follows:

19 "§103D- Preference for products that do not contain  
20 hydrofluorocarbons. (a) The policy board shall adopt rules  
21 that provide a preference for products that:



- 1        (1) Are not restricted under section 342B-B;
- 2        (2) Do not contain hydrofluorocarbons or contain  
3        hydrofluorocarbons with a comparatively low global  
4        warming potential;
- 5        (3) Are not designed to function only in conjunction with  
6        hydrofluorocarbons characterized by a comparatively  
7        high global warming potential; and
- 8        (4) Were not manufactured using hydrofluorocarbons or were  
9        manufactured using hydrofluorocarbons with a low  
10       global warming potential.
- 11       (b) A governmental body shall not knowingly purchase a  
12       product that is not accorded a preference in the purchasing and  
13       procurement rules established by the policy board pursuant to  
14       subsection (a) unless there is no cost-effective and  
15       technologically feasible option that is accorded a preference.
- 16       (c) Nothing in this section shall require a governmental  
17       body to breach an existing contract or dispose of stock that has  
18       been ordered or is in the possession of the governmental body as  
19       of the effective date of this section.
- 20       (d) As used in this section, "hydrofluorocarbon" shall  
21       have the same meaning as in section 342B-A."



1 SECTION 4. Chapter 107, Hawaii Revised Statutes, is  
2 amended by adding a new section to part II to be appropriately  
3 designated and to read as follows:

4 "§107- State building codes; hydrofluorocarbons;  
5 updates. (a) When adopting, amending, or updating the codes  
6 and standards identified in section 107-25, the council shall  
7 establish codes and standards that permit the use of substitutes  
8 and do not require the use of substitutes that are restricted by  
9 section 342B-B.

10 (b) As used in this section, "substitute" shall have the  
11 same meaning as in section 342B-A."

12 SECTION 5. (a) The Hawaii state energy office, in  
13 conjunction with the environmental management division of the  
14 department of health, shall conduct a study that:

- 15 (1) Addresses how to increase the use of refrigerants with  
16 low global warming potential in mobile sources,  
17 utility equipment, and consumer appliances;
- 18 (2) Addresses how to reduce other uses of  
19 hydrofluorocarbons in the State; and
- 20 (3) Provides recommendations for funding, structuring, and  
21 prioritizing a state program that incentivizes or



1 provides grants to support the elimination of legacy  
2 uses of all hydrofluorocarbons, including  
3 hydrofluorocarbons that are not regulated by section 2  
4 of this Act.

5 (b) The Hawaii state energy office shall submit a report  
6 of its findings and recommendations, including any proposed  
7 legislation, to the legislature no later than December 1, 2022.

8 SECTION 6. This Act does not affect rights and duties that  
9 matured, penalties that were incurred, and proceedings that were  
10 begun before its effective date.

11 SECTION 7. If any provision of this Act, or the  
12 application thereof to any person or circumstance, is held  
13 invalid, the invalidity does not affect other provisions or  
14 applications of the Act that can be given effect without the  
15 invalid provision or application, and to this end the provisions  
16 of this Act are severable.

17 SECTION 8. In codifying the new sections added by section  
18 2 of this Act, the revisor of statutes shall substitute  
19 appropriate section numbers for the letters used in designating  
20 the new sections in this Act.





1 SECTION 9. New statutory material is underscored.

2 SECTION 10. This Act shall take effect on July 1, 2050.



**Report Title:**

Greenhouse Gas Emissions; Hydrofluorocarbons; Hawaii State Energy Office; Environmental Management Division; DOH; Phase Out; Procurement; Study

**Description:**

Establishes regulations on the use of hydrofluorocarbons in state law. Phases out hydrofluorocarbons in favor of alternatives with lower global warming potential. Establishes a preference for products that do not contain hydrofluorocarbons in the state procurement code. Directs the Hawaii State Energy Office and the Environmental Management Division of the Department of Health to study how to increase the use of refrigerants with low global warming potential, reduce the use of hydrofluorocarbons, and recommend how to fund, structure, and prioritize a state program that incentivizes or provides grants to support the elimination of legacy uses of hydrofluorocarbons. Effective 7/1/2050. (HD1)

*The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.*

