JAN 1 7 2020

A BILL FOR AN ACT

RELATING TO HYDROFLUOROCARBON REFRIGERANTS.

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

- 1 SECTION 1. The legislature finds that hydrofluorocarbons,
- 2 or HFCs, are air pollutants that are at least one hundred times
- 3 and up to several thousand times more potent as greenhouse gases
- 4 than carbon dioxide. Due to their global warming potential,
- 5 hydrofluorocarbons pose a significant threat when released to
- 6 our environment.
- 7 The legislature finds that hydrofluorocarbons are entirely
- 8 human-made and do not occur naturally. Hydrofluorocarbons are
- 9 mainly used in refrigeration and air conditioning equipment and
- 10 as propellants in industrial aerosols, having replaced the use
- 11 of chlorofluorocarbons in those roles after chlorofluorocarbons
- 12 were found to damage the ozone layer in the upper atmosphere.
- 13 Hydrofluorocarbons are also used for foam blowing, solvent
- 14 cleaning, and in fire extinguishers. The main sources of
- 15 hydrofluorocarbons in the atmosphere are from the manufacture
- 16 of, leakage from, and disposal of refrigeration and air
- 17 conditioning equipment and aerosols.



- 1 Although the United States Environmental Protection Agency
- 2 adopted rules in 2016 to ban the use of certain
- 3 hydrofluorocarbons, a federal appeals court vacated those rules
- 4 in 2017, finding that the Environmental Protection Agency did
- 5 not have the clear authority to impose the ban. Due to the
- 6 absence of federal regulation in this area, the legislature
- 7 finds that states must now provide leadership to address the use
- 8 of hydrofluorocarbons. Climate change will not wait for
- 9 Congress to amend federal law to clarify the scope of the
- 10 Environmental Protection Agency's authority. The legislature
- 11 also finds that prompt state action will help American
- 12 businesses retain their positions as global leaders in air
- 13 conditioning and refrigerant technologies.
- 14 Hawaii's 2015 greenhouse gas emissions report, which was
- 15 prepared by the university of Hawaii's economic research
- organization for the department of health and released in 2019,
- 17 estimated that hydrofluorocarbon emissions rose more than fifty
- 18 per cent between 2007 and 2015 and totaled approximately eight
- 19 hundred twenty thousand metric tons of carbon dioxide
- 20 equivalents, accounting for ninety-nine per cent of the State's
- 21 industrial process and product use emissions. Despite this,

- 1 cost-effective alternatives to the most damaging
- 2 hydrofluorocarbons are readily available. Therefore,
- 3 hydrofluorocarbons will be comparatively easy to reduce and
- 4 eliminate without widespread implications for the way that power
- 5 is produced, heavy industries operate, or people transport
- 6 themselves. Substituting or reducing the use of
- 7 hydrofluorocarbons with the highest global warming potential
- 8 will provide a significant boost to the State's efforts to
- 9 reduce its greenhouse gas emissions to the limits established.
- 10 Accordingly, the purpose of this Act is to encourage the
- 11 transition to the use of less damaging hydrofluorocarbons or
- 12 suitable substitutes in various applications in Hawaii. The
- 13 legislature notes that the framework established by this Act is
- 14 similar to regulations that were previously adopted by the
- 15 Environmental Protection Agency and that have been subsequently
- 16 adopted in other states.
- 17 SECTION 2. Chapter 342B, Hawaii Revised Statutes, is
- 18 amended by adding a new part to be appropriately designated and
- 19 to read as follows:
- 20 "PART . REGULATION OF HYDROFLUOROCARBONS

- 1 §342B-A Definitions. As used in this part, unless the
- 2 context otherwise requires:
- 3 "Class I substance" and "class II substance" means those
- 4 substances listed in 42 United States Code section 7671a, as it
- 5 read on November 15, 1990, or those listed in Appendix A or B of
- 6 Subpart A of 40 Code of Federal Regulations part 82, as those
- 7 read on January 3, 2017.
- 8 "Consumer refrigeration product" shall have the same
- 9 meaning as in 10 Code of Federal Regulations section 430.2, as
- 10 that section read on January 3, 2017.
- "Greenhouse gas" includes carbon dioxide, methane, nitrous
- 12 oxide, hydrofluorocarbons, perfluorocarbons, sulfur
- 13 hexafluoride, and any other gas designated by the department by
- 14 rule.
- "Hydrofluorocarbons" means a class of greenhouse gases that
- 16 are saturated organic compounds containing hydrogen, fluorine,
- 17 and carbon.
- 18 "Manufacturer" means a person that produces, imports, or
- 19 distributes a product that contains or uses hydrofluorocarbons.

- 1 "Retrofit" shall have the same meaning as in 40 Code of
- 2 Federal Regulations section 82.152 section 152, as that section
- 3 read on January 3, 2017.
- 4 "Substitute" means a chemical, product substitute, or
- 5 alternate manufacturing process, whether existing or new, that
- 6 is used to perform a function previously performed by a class I
- 7 substance or class II substance and any substitute subsequently
- 8 adopted to perform that function, including but not limited to
- 9 hydrofluorocarbons; provided that the term shall not include
- 10 2-BTP or any compound as applied to its use in aerospace fire
- 11 extinguishing systems.
- 12 §342B-B Regulation of hydrofluorocarbons. (a) No person
- 13 shall offer any product or equipment for sale, lease, rent,
- 14 install, or otherwise cause the product or equipment to enter
- 15 commerce in the State if that equipment or product consists of,
- 16 uses, or will use a substitute, consistent with the deadlines
- 17 established in subsection (b).
- 18 (b) The restrictions under subsection (a) for the
- 19 following products and equipment identified in Appendixes U and
- 20 V, Subpart G of 40 Code of Federal Regulations Part 82, as those
- 21 read on January 3, 2017, shall take effect beginning:

1	(1)	Janu	ary 1, 2021, for:
2		(A)	Propellants;
3		(B)	Rigid polyurethane applications and spray foam,
4			flexible polyurethane, integral skin
5			polyurethane, flexible polyurethane foam,
6			polystyrene extended sheet, polyolefin, phenolic
7			insulation board, and bunstock; and
8		(C)	Supermarket systems, remote condensing units,
9			standalone units, and vending machines;
10	(2)	Janu	ary 1, 2022, for:
11		(A)	Refrigerated food processing and dispensing
12			equipment;
13		(B)	Compact consumer refrigeration products; and
14		(C)	Polystyrene extruded boardstock and billet, and
15			rigid polyurethane low-pressure two component
16			spray foam;
17	(3)	Janu	ary 1, 2023, for consumer refrigeration products
18		othe	er than compact and built-in consumer refrigeration
19		prod	lucts;
20	(4)	Julv	1. 2023. for cold storage warehouses:

- 1 (5) July 1, 2024, for built-in consumer refrigeration
 2 products;
- (6) July 1, 2024, for centrifugal chillers and positive
 displacement chillers; and
- 5 (7) On either July 1, 2022, or the effective date of the
 6 restrictions identified in appendixes U and V, Subpart
 7 G of 40 Code of Federal Regulations Part 82, as those
 8 read on January 3, 2017, whichever is later, for all
 9 other applications and end uses for substitutes not
 10 covered by the categories listed in paragraphs (1)
 11 through (6) of this subsection.
- 12 Except where existing equipment is retrofit, nothing 13 in this section shall be deemed to require a person who acquired 14 a restricted product or equipment prior to the effective date of 15 the restrictions in subsection (b) to cease use of that product 16 or equipment. A product or equipment manufactured prior to the 17 applicable effective date of the restrictions specified in 18 subsection (b) may be sold, imported, exported, distributed, 19 installed, and used after the specified effective date.
- (d) The department may adopt rules pursuant to chapter 91to:

1	(1)	Modify the effective date of a prohibition established
2		in subsection (b) if the department determines that
3		the rule reduces the overall risk to human health or
4		the environment and reflects the earliest date that a
5		substitute is currently or potentially available;
6	(2)	Prohibit the use of a substitute if the department
7		determines that the prohibition reduces the overall
8		risk to human health or the environment and that a
9		lower risk substitute is currently or potentially
10		available;
11	(3)	Adopt a list of approved substitutes, use conditions,
12		or use limits, if any;
13	(4)	Add or remove substitutes, use conditions, or use
14		limits to or from the list of approved substitutes if
15		the department determines those substitutes reduce the
16		overall risk to human health and the environment; and
17	(5)	Designate acceptable uses of hydrofluorocarbons for
18		medical uses that are exempt from the requirements of
19		subsection (b).
20	(e)	Within twelve months of another state's enactment or
21	adoption	of restrictions on substitutes applicable to new light

- 1 duty vehicles, the department may adopt restrictions applicable
- 2 to the sale, lease, rental, or other introduction into commerce
- 3 by a manufacturer of new light duty vehicles consistent with the
- 4 restrictions identified in Appendix B, Subpart G of 40 Code of
- 5 Federal Regulations Part 82, as it read on January 3, 2017. The
- 6 department shall not adopt restrictions that take effect prior
- 7 to the effective date of the restrictions adopted or enacted in
- 8 at least one other state.
- 9 (f) If the United States Environmental Protection Agency
- 10 approves a previously prohibited hydrofluorocarbon blend with a
- 11 global warming potential of seven hundred fifty or less for foam
- 12 blowing of polystyrene extruded boardstock and billet and rigid
- 13 polyurethane low-pressure two-component spray foam pursuant to
- 14 the significant new alternatives policy program under 42 United
- 15 States Code section 7671k, the department shall adopt rules to
- 16 conform its rules to that federal action as soon as practicable.
- 17 §342B-C Disclosure of the use of substitutes. A
- 18 manufacturer shall disclose the substitutes used in its products
- 19 or equipment in the form of:

1	(1)	A label on the product or equipment that meets the	
2		requirements established by the department by rule;	
3		provided that:	
4		(A) To the extent practicable, the department shall	
5		recognize existing labeling that provides	
6		sufficient disclosure of the use of substitutes	
7		in the product or equipment;	
8		(B) The department shall consider labels required by	7
9		state building codes and other safety standards	
10		when adopting rules pursuant to this paragraph;	
11		and	
12		(C) The department shall not require the labeling of	=
13		aircraft and aircraft components subject to	
14		certification requirements of the Federal	
15		Aviation Administration; and	
16	(2)	Submitting information about the use of substitutes t	.c
17		the department, upon request; provided that the	
18		submission meets the following deadlines:	
19		(A) By December 31, 2021, all manufacturers shall	
20		notify the department of the status of each	
21		product class utilizing hydrofluorocarbons or	

1		other substitutes restricted under section 342B-A
2		that the manufacturer sells, offers for sale,
3		leases, installs, or rents in the State. This
4		status notification shall identify the
5		substitutes used by the products or equipment in
6		each product or equipment class in a manner
7		determined by rule;
8	(B)	Within one hundred twenty days of the date a
9		restriction is put in place pursuant to this
10		section, any manufacturer affected by the
11		restriction shall provide an updated status
12		notification, which shall indicate whether the
13		manufacturer has ceased the use of
14		hydrofluorocarbons or substitutes restricted
15		under this section within each product class and,
16		if not, what hydrofluorocarbons or other
17		restricted substitutes remain in use; and
18	(C)	After the effective date of a restriction put in
19		place pursuant to this section, a manufacturer
20		shall provide an updated status notification wher
21		the manufacturer introduces a new or modified

1	product or piece of equipment that uses
2	hydrofluorocarbons or changes the type of
3	hydrofluorocarbons utilized within a product
4	class affected by a restriction; provided that
5	the notification shall occur within one hundred
6	twenty days of the date the product or equipment
7	triggering the notification requirement in this
8	subparagraph is introduced into commerce in the
9	State.
10	§342B-D Rules. The department may adopt rules pursuant to
11	chapter 91 to implement this section; provided that:
12	(1) The department shall seek, where feasible, to adopt
13	rules, including rules under section 342B-B(e), that
14	are consistent with the regulatory standards,
15	exemptions, reporting obligations, disclosure
16	requirements, and other compliance requirements of
17	other states or the federal government that have
18	adopted restrictions on the use of hydrofluorocarbons
19	and other substitutes; and
20	(2) Prior to the adoption or update of a rule under this

section, the department shall identify the sources of



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2	science.
3	§342B-E Aircraft maintenance; definition. For the
4	purposes of implementing the restrictions specified in
5	Appendix U of Subpart G of 40 C.F.R. Part 82, as it read on
6	January 3, 2017, consistent with this section, the department

information it relied on, including peer-reviewed

- 7 shall interpret the term "aircraft maintenance" to mean
- 8 activities to support the production, fabrication, manufacture,
- 9 rework, inspection, maintenance, overhaul, or repair of
- 10 commercial, civil, or military aircraft, aircraft parts,
- 11 aerospace vehicles, or aerospace components.
- 12 §342B-F Authority to regulate supplementary. The
- 13 authority granted by this part to the department to restrict the
- 14 use of substitutes shall be supplementary to the department's
- 15 authority to control air pollution pursuant to this chapter.
- 16 Nothing in this part shall be construed to limit any authority
- 17 granted to the department under any other law.
- 18 §342B-G Use of commercial refrigeration equipment after
- 19 effective date of restrictions. Except where existing equipment
- 20 is retrofit, the restrictions of this part shall not apply to or
- 21 limit any use of commercial refrigeration equipment that was



- 1 installed or placed in use prior to the effective date of the
- 2 restrictions established in this part.
- 3 §342B-H Penalties. (a) The department may fine any
- 4 person not more than \$25,000 per day for each violation of any
- 5 provision of this part or any rule adopted under this part. The
- 6 director may also impose an administrative penalty of not more
- 7 than \$25,000 per day for each violation of any provision of this
- 8 part or any rule adopted under this part. Each day of each
- 9 violation shall constitute a separate offense for the purpose of
- 10 calculating the fine or penalty.
- 11 (b) Any person who fails to comply with an order issued
- 12 pursuant to this part shall be fined not more than \$25,000 for
- 13 each day of continued noncompliance.
- 14 (c) A fine or administrative penalty incurred but not paid
- 15 shall accrue interest, beginning on the ninety-first day
- 16 following the date the penalty became due, at the highest rate
- 17 allowed under chapter 478. If a fine or administrative penalty
- 18 is appealed, interest shall not begin to accrue until the
- 19 thirty-first day following the date of the final resolution of
- 20 the appeal.

- 1 (d) The maximum penalty amount established by subsection
- 2 (a) may be increased annually to adjust for inflation, as
- 3 calculated by the consumer price index or other acceptable
- 4 adjustment mechanism as determined by the rule.
- 5 (e) All fines collected under this section shall be
- 6 deposited in the environmental response revolving fund
- 7 established by section 128D-2.
- 8 (f) A public or private entity that receives or is the
- 9 potential recipient of a grant from the department may have the
- 10 grant rescinded or withheld by the department for failure to
- 11 comply with the provisions of this part.
- 12 (g) In addition to other penalties provided by this part
- 13 or by a rule adopted pursuant to this part, any person who
- 14 knowingly underreports emissions or other information used to
- 15 set fees, or persons who are required to pay emission or permit
- 16 fees who are more than ninety days late with regard to the
- 17 payment, may be subject to a penalty equal to three times the
- 18 amount of the original fee owed.
- 19 (h) The department shall adopt rules to excuse excess
- 20 emissions from enforcement action if the emissions are
- 21 unavoidable. The rules shall specify the criteria and

I	procedure	s for the department and local air authorities to		
2	determine	whether a period of excess emissions is excusable in		
3	accordanc	e with the state implementation plan."		
4	SECT	ION 3. Chapter 103D, Hawaii Revised Statutes, is		
5	amended b	y adding a new section to part X to be appropriately		
6	designated and to read as follows:			
7	" <u>§10</u>	3D- Preference for products that do not contain		
8	hydrofluo	rocarbons. (a) The policy board shall adopt rules		
9	that prov	ide a preference for products that:		
10	(1)	Are not restricted under section 342B-B;		
11	(2)	Do not contain hydrofluorocarbons or contain		
12		hydrofluorocarbons with a comparatively low global		
13		warming potential;		
14	(3)	Are not designed to function only in conjunction with		
15		hydrofluorocarbons characterized by a comparatively		
16		high global warming potential; and		
17	(4)	Were not manufactured using hydrofluorocarbons or were		
18		manufactured using hydrofluorocarbons with a low		
19		global warming potential.		
20	(b)	A government body shall not knowingly purchase a		
21	product t	hat is not accorded a preference in the purchasing and		



- 1 procurement rules established by the policy board pursuant to
- 2 subsection (a) unless there is no cost-effective and
- 3 technologically feasible option that is accorded a preference.
- 4 (c) Nothing in this section shall require an agency to
- 5 breach an existing contract or dispose of stock that has been
- 6 ordered or is in the possession of the agency as of the
- 7 effective date of this section.
- 8 (d) As used in this section, "hydrofluorocarbon" shall
- 9 have the same meaning as in section 342B-A."
- 10 SECTION 4. Chapter 107, Hawaii Revised Statutes, is
- 11 amended by adding a new section to part II to be appropriately
- 12 designated and to read as follows:
- 13 "\$107- State building codes; hydrofluorocarbons;
- 14 updates. (a) When adopting, amending, or updating the codes
- 15 and standards identified in section 107-25, the council shall
- 16 establish codes and standards that permit the use of substitutes
- 17 and do not require the use of substitutes that are restricted by
- 18 section 342B-B.
- 19 (b) As used in this section, "substitute" shall have the
- 20 same meaning as in section 342B-A."

1	SECTION 5. (a) The department of health, in conjunction
2	with the state energy office, shall conduct a study that:
3	(1) Addresses how to increase the use of refrigerants with
4	low global warming potential in mobile sources,
5	utility equipment, and consumer appliances;
6	(2) Addresses how to reduce other uses of
7	hydrofluorocarbons in the State; and
8	(3) Provides recommendations for funding, structuring, and
9	prioritizing a state program that incentivizes or
10	provides grants to support the elimination of legacy
11	uses of all hydrofluorocarbons, including
12	hydrofluorocarbons that are not regulated by section 2
13	of this Act.
14	(b) The department of health shall submit a report of its
15	findings and recommendations, including any proposed
16	legislation, to the legislature no later than December 1, 2022.
17	SECTION 6. This Act does not affect rights and duties that
18	matured, penalties that were incurred, and proceedings that were
19	begun before its effective date.
20	SECTION 7. If any provision of this Act, or the
21	application thereof to any person or circumstance, is held



- 1 invalid, the invalidity does not affect other provisions or
- 2 applications of the Act that can be given effect without the
- 3 invalid provision or application, and to this end the provisions
- 4 of this Act are severable.
- 5 SECTION 8. In codifying the new sections added by section
- 6 2 of this Act, the revisor of statutes shall substitute
- 7 appropriate section numbers for the letters used in designating
- 8 the new sections in this Act.
- 9 SECTION 9. New statutory material is underscored.
- 10 SECTION 10. This Act shall take effect on July 1, 2020.

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INTRODUCED BY:



Report Title:

Hydrofluorocarbons; Greenhouse Gas Emissions; Phase Out; Procurement; Procurement Policy Board; DOH; State Energy Office; Study

Description:

Preserves preexisting federal regulations on the use of hydrofluorocarbons in state law by phasing out those compounds in favor of alternatives with lower global warming potential. Establishes a preference in state procurement for products that do not contain hydrofluorocarbons. Directs the Department of Health and the State Energy Office 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 supports the elimination of legacy uses of hydrofluorocarbons.

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