### A BILL FOR AN ACT

RELATING TO CLIMATE CHANGE MITIGATION.

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

- SECTION 1. The legislature finds that hydrofluorocarbons

  (HFCs) are chemicals commonly used in air conditioning and

  refrigeration, in insulating foam, and as propellants. HFCs
- 4 were designed to replace ozone depleting substances that were
- 6 now quickly building up in Earth's atmosphere, where they act as

harming the planet's protective ozone layer. However, HFCs are

- 7 greenhouse gases that can have very high global warming
- 8 potentials that are thousands of times more potent than carbon
- 9 dioxide in contributing to climate change. If HFCs continue to
- 10 be used, it is estimated that they could account for up to
- 11 twenty per cent of global greenhouse gas emissions by 2050.
- 12 The legislature further finds that the United States
- 13 Congress enacted the American Innovation and Manufacturing Act
- 14 to limit HFC production and to phase out the use of HFCs by
- 15 eighty-five per cent over the next fifteen years. This action
- 16 will support the transition to refrigeration and air
- 17 conditioning systems that use less damaging HFCs or suitable

5

- 1 substitutes with zero to low potential for global warming. As
- 2 part of the transition to low global warming potential
- 3 alternative refrigerants, existing systems and their
- 4 refrigerants must be carefully managed to minimize the impacts
- 5 on the environment.
- 6 The legislature finds that California has implemented a
- 7 successful refrigerant management program to monitor and reduce
- 8 emissions of refrigerants with high global warming potential and
- 9 ozone depleting substances. The California refrigerant
- 10 management program requires registration, leak inspection, and
- 11 leak repair requirements for their non-residential stationary
- 12 appliances, including stationary refrigeration systems and air
- 13 conditioning systems.
- 14 The legislature also finds that a similar state level
- 15 refrigerant management program in Hawaii would support state
- 16 greenhouse gas reduction goals and prevent leakage of these
- 17 harmful chemicals into the atmosphere.
- 18 Therefore, the purpose of this Act is to establish a Hawaii
- 19 refrigerant management program designed to:
- 20 (1) Reduce emissions of high global warming potential
- 21 refrigerants and any refrigerant that is an ozone

1		depleting substance from operation of stationary,
2		commercial, and industrial refrigeration equipment;
3	(2)	Require registration and regular leak inspections and
4		reporting for commercial and industrial stationary
5		refrigeration systems that are not equipped with
6		automatic leak detection;
7	(3)	Exempt systems with de minimis charging capacity of
8		high global warming potential refrigerant or ozone
9		depleting substance refrigerant in a single system
10		from registration, leak inspection, and reporting
11		requirements; and
12	(4)	Require service practices for the installation,
13		servicing, repair, and disposal of stationary
14		refrigeration and air conditioning systems that use
15		high global warming potential or ozone depleting
16		substance refrigerants.
17	SECT	ION 2. The Hawaii Revised Statutes is amended by
18	adding a	new chapter to be appropriately designated and to read
19	as follow	s:
20		"CHAPTER

REFRIGERANT MANAGEMENT - EMISSIONS REDUCTION

21

- 1 § -1 Definitions. As used in this chapter:
- 2 "Air conditioning system" means any stationary air
- 3 conditioning equipment. "Air conditioning system" does not mean
- 4 mobile air conditioning, including those used in motor vehicles,
- 5 rail and trains, aircraft, watercraft, recreational vehicles,
- 6 recreational trailers, and campers.
- 7 "Chlorofluorocarbon" or "CFC" means a class of greenhouse
- 8 gases that are compounds consisting of chlorine, fluorine, and
- 9 carbon.
- "Department" means the department of health.
- "High-GWP refrigerant" means a compound used as a heat
- 12 transfer fluid or gas that is a chlorofluorocarbon, a
- 13 hydrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon,
- 14 or any compound or blend of compounds with global warming
- 15 potential values that meet or exceed the global warming
- 16 potential applicability thresholds established by the
- 17 department.
- "Hydrofluorocarbon" or "HFC" means a class of greenhouse
- 19 gases that are saturated organic compounds containing hydrogen,
- 20 fluorine, and carbon.

- 1 "Refrigeration system" or "refrigeration equipment" means
- 2 any stationary device that is designed to contain and use
- 3 refrigerant, including equipment used in retail food, cold
- 4 storage, and industrial process refrigeration and cooling that
- 5 does not use a chiller, ice rinks, and other refrigeration
- 6 applications.
- 8 exemptions. (a) The department shall establish a refrigerant
- 9 management program designed to reduce emissions of high-GWP
- 10 refrigerants and ozone depleting substance refrigerants from
- 11 activities or equipment responsible for significant volumes of
- 12 such emissions, including the operation of stationary commercial
- 13 and industrial large refrigeration systems and activities to
- 14 install, service, repair, and dispose of stationary
- 15 refrigeration and air conditioning appliances.
- 16 (b) The refrigerant management program shall require
- 17 regular leak inspections and reporting for stationary commercial
- 18 and industrial refrigeration systems that are not equipped with
- 19 automatic leak detection.
- 20 (c) A commercial and industrial refrigeration system with
- 21 a de minimis charging capacity in a single system shall be

- 1 exempt from the registration, leak inspection, and reporting
- 2 requirements of this chapter.
- 3 (d) Refrigeration and air conditioning operations that use
- 4 refrigerants with a global warming potential less than the
- 5 global warming potential thresholds established by the
- 6 department and that are not ozone depleting substances shall be
- 7 exempt from the registration, leak inspection, and reporting
- 8 requirements of this chapter.
- 9 (e) The refrigerant management program shall require
- 10 service practices for the installation, servicing, repair, and
- 11 disposal of stationary refrigeration and air conditioning
- 12 appliances.
- 13 (f) The department may require compliance with the
- 14 provisions of this chapter no earlier than January 1, 2025.
- 15 (g) The department may exempt refrigeration systems
- 16 associated with de minimis emissions from the requirements of
- 17 this chapter.
- 18 § -3 Rules. (a) The department shall adopt rules
- 19 necessary for the purposes of this chapter.

1	(b)	The rules shall apply to operations that utilize high-
2	GWP refri	gerants and refrigerants that are ozone depleting
3	substance	s.
4	(c)	The rules shall include the following:
5	(1)	Establishment of:
6		(A) De minimis charging capacity level;
7		(B) Global warming potential threshold values;
8		(C) Leak rate thresholds;
9	(2)	Annual registration requirements for each owner or
10		operator of a stationary commercial and industrial
11		refrigeration system that utilizes a high-GWP
12		refrigerant or ozone depletion substance refrigerant
13		and exceeds the de minimis charging capacity level;
14	(3)	Refrigerant leak detection, monitoring, and reporting
15		requirements for stationary commercial and industrial
16		refrigeration system that utilizes a high-GWP
17		refrigerant or ozone depletion substance refrigerant
18		and exceeds the de minimis charging capacity level;
19	(4)	Requirements for reporting leaks above the applicable
20		leak rate threshold and submitting the leak repair
21		verification test results, or submitting a retrofit or

1		retirement plan, including a timeline for the retrofit
2		or retirement and disposal of retired refrigeration
3		equipment;
4	(5)	Record retention requirements for owners and operators
5		of facilities and technicians servicing equipment that
6		contain and use refrigerant;
7	(6)	Service practices for the installation, servicing,
8		repair, and disposal of stationary appliances
9	•	including both stationary refrigeration and air
10		conditioning systems; and
11	(7)	Implementation and enforcement of the refrigerant
12		management program, including penalties for violations
13		of the chapter.
14	(d)	The department may establish by rule annual fees that
15	adequatel	y cover the direct and indirect cost to develop,
16	support,	and administer the refrigerant management program."
17	SECT	ION 3. Chapter 107, Hawaii Revised Statutes, is
18	amended b	y adding a new section to be appropriately designated
19	and to re	ad as follows:
20	" <u>§10</u>	7- State building code; hydrofluorocarbons; update.
21	When adop	ting, amending, or updating the codes and standards

1	identified in section 107-25, the council shall establish codes
2	and standards that are consistent with the goal of reducing
3	greenhouse gas emissions associated with hydrofluorocarbons."
4	SECTION 4. There is appropriated out of the general
5	revenues of the State of Hawaii the sum of \$ or so
6	much thereof as may be necessary for fiscal year 2023-2024 and
7	the same sum or so much thereof as may be necessary for fiscal
8	year 2024-2025 for the establishment of a refrigerant management
9	program to reduce emissions of hydrofluorocarbon refrigerants
10	and chlorofluorocarbon cooling agents from activities or
11	equipment responsible for significant volumes of such emissions.
12	The sums appropriated shall be expended by the department
13	of health for the purposes of this Act.
14	SECTION 5. This Act shall take effect on July 1, 2023.
15	$\bigcirc$ $\downarrow$ $\bigcirc$ $\bigcirc$ $\bigcirc$
	INTRODUCED BY: New E. Lowen

JAN 1 8 2023

#### Report Title:

Refrigerant Management Program; High Global Warming Potential Refrigerants; Ozone Depletion Substances; Greenhouse Gas Emissions Reduction; State Building Code; Appropriation

#### Description:

Requires the department of health to establish a refrigerant management program to reduce emissions of high global warming potential refrigerants and any refrigerant that is an ozone depleting substance from operation of stationary, commercial, and industrial refrigeration equipment responsible and adopt rules for the regulation of the use of such refrigerants. Requires the state building code council to establish codes and standards consistent with the goal of reducing greenhouse gas emissions associated with hydrofluorocarbons when updating the state building code. Appropriates funds.

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