



STATE OF HAWAII
DEPARTMENT OF HEALTH
KA 'OIHANA OLAKINO
P. O. BOX 3378
HONOLULU, HI 96801-3378
doh.testimony@doh.hawaii.gov

**Testimony in SUPPORT of HB2654
RELATING TO BUILDING CODES**

REPRESENTATIVE LINDA ICHIYAMA, CHAIR
HOUSE COMMITTEE ON WATER & LAND

REPRESENTATIVE NICOLE E. LOWEN, CHAIR
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Hearing Date: 2/6/2024

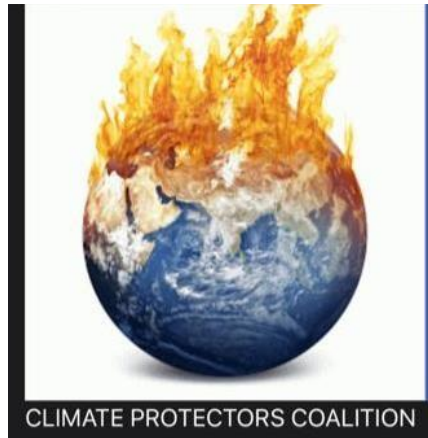
Room Number: 325

1 **Fiscal Implications:** None

2 **Department Testimony:** The Department supports the measure to facilitate the transition from
3 hydrofluorocarbon (HFC) refrigerants with high-global warming potentials (GWPs) to the use of
4 low-GWP alternatives, which would reduce the refrigerants' impact on climate change. HFCs
5 are powerful greenhouse gases and EPA has approved the use of lower GWP alternatives. The
6 proposed new section in Hawaii Revised Statutes (HRS) Chapter 107 would prevent the state and
7 county building codes from prohibiting or limiting the use of these low-GWP refrigerant
8 alternatives. In updating HRS Chapter 107, Hawaii would join over a dozen states, including
9 Washington, Oregon, California, and Arizona, who have adopted or are proposing to adopt
10 similar language to that proposed in this bill in their building code or building
11 construction/planning regulations. Failure to update HRS Chapter 107 could inhibit Hawaii's
12 ability to reduce refrigerant greenhouse gas (GHG) emissions and hamper progress toward
13 Hawaii's GHG reduction goals.

14 **Offered Amendments:** None

15 Thank you for the opportunity to testify.



To: The Honorable Chairs Linda Ichiyama and Nicole Lowen, the Honorable Vice Chairs Mahina Poepoe and Elle Cochran, and Members of the Committees on Water and Land and Energy and Environmental Protection.

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: **Hearing HB2654 RELATING TO BUILDING CODES**

Hearing: Tuesday February 6, 2023, 9:05 a.m., room 325

Aloha Chairs Ichiyama and Lowen, Vice Chairs Poepoe and Cochran, and Members of the Committees on Water and Land and Energy and Environmental Protection!

The Climate Protectors Hawai'i seek to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate.

Climate Protectors Hawai'i STRONGLY SUPPORTS HB2654.

Hydrofluorocarbons (HFCs) are chemicals commonly used in air conditioning, refrigeration, and insulating foam and as propellants. HFCs were designed to replace ozone depleting substances that were harming the planet's protective ozone layer. However, HFCs are now acting as greenhouse gases that can have very high global warming potentials that are **thousands of times more potent**

than carbon dioxide in contributing to climate change. If HFCs continue to be used, it is estimated that they could account **for up to twenty per cent of global greenhouse gas emissions by 2050!** In the battle against climate warming, **it is essential that we replace HFCs with refrigerants that don't have high global warming potentials as soon as possible!**

Building codes need to be updated to avoid delaying the transition to hydrofluorocarbon refrigerant alternatives and comply with the American Innovation and Manufacturing Act and EPA rules in order to give manufacturers certainty to make the needed transition.

This bill would clarify that no State or county building code would prohibit the use of a substitute refrigerant allowed by the EPA.

This will help reduce greenhouse gas emissions.

Please pass this bill!

Mahalo for providing the opportunity to testify!

Climate Protectors Hawai'i (by Ted Bohlen)



To: The House Committee on Water & Land (WAL)
and
The House Committee on Energy and Environmental Protection (EEP)
From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, February 6, 2024, 9:05am

In support of HB2654

Aloha Chairs Ichiyama and Lowen, Vice Chairs Poepoe and Cochran, and members of the WAL and EEP committees,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **supports HB2654** which clarifies that no state or county building code shall prohibit the use of a substitute refrigerant allowed by the Environmental Protection Agency if the applicable equipment is listed and installed in compliance with the latest safety standards.

Certain refrigerants, including hydrofluorocarbons (HFCs), are potent greenhouse gases that can have an extreme effect on global warming. HFCs are greenhouse gases with global warming potentials that can be many thousands of times more potent than carbon dioxide. Phasing out these climate-wrecking pollutants as soon as possible is critical in our fight against climate breakdown.

Building codes need to be updated to avoid delaying the transition to hydrofluorocarbon refrigerant alternatives and comply with the American Innovation and Manufacturing Act and EPA rules in order to give manufacturers certainty to make the needed transition. By clarifying that no state or county building code shall prohibit the use of a substitute refrigerant allowed by the Environmental Protection Agency, this measure would help facilitate this transition.

Mahalo for the opportunity to testify.

Sherry Pollack
Co-Founder, 350Hawaii.org



TESTIMONY OF MIKE NEROZZI
DIRECTOR OF GOVERNMENT AFFAIRS

ON BEHALF OF
THE AIR-CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE

BEFORE THE HAWAII HOUSE OF REPRESENTATIVES
COMMITTEE ON WATER & LAND
COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

HEARING ON HOUSE BILL 2654

FEBRUARY 6, 2024

Greetings, Chair Ichiyama, Chair Lowen, and members of the House Committees on Land and Water, and Energy and Environmental Protection. My name is Mike Nerozzi, and I am the Director of Government Affairs for the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Thank you for allowing me the opportunity to convey AHRI's strong support for House Bill 2654, sponsored by Speaker Scott Saiki, which will provide the HVACR industry with the certainty needed to comply with forthcoming federal regulations phasing down the use of hydrofluorocarbons (HFCs) in refrigerants.

AHRI represents more than 330 manufacturers of air-conditioning, heating, commercial refrigeration equipment. It is an internationally recognized advocate for the HVACR industry and certifies the performance of many of the products manufactured by its members. In North America, the annual economic activity resulting from the HVACR industry is more than \$211 billion. In the United States alone, AHRI member companies, along with distributors, contractors, and technicians employ more than 700,000 people. We are also pleased to share with you that the HVACR industry supports more than 900 jobs in Hawaii.

As members of the Committee may be aware, the federal American Innovation and Manufacturing Act (AIM Act) is phasing down the production and import of a class of chemicals known as hydrofluorocarbons (HFCs). HFCs are primarily used as refrigerants in air conditioners and refrigerators, along with other applications, such as foams, solvents, and fire suppressants.

The U.S. Environmental Protection Agency (EPA) is in the process of implementing the AIM Act in a way that will guide an orderly and environmentally friendly transition to a range of new substitute refrigerants. Hundreds of substitutes exist and are commercially available for all major uses of HFCs. U.S. manufacturers already are planning the transition to these new refrigerants, which are creating jobs, stimulating new investment, and positioning the U.S. to sustain its technological leadership in the HVACR industry across the world.

The climate benefits of the AIM Act implementation are considerable. Because many HFCs are thousands of times more powerful than carbon dioxide at warming the planet, the transition from HFCs will reduce U.S. greenhouse gas (GHG) emissions by approximately 2.4 billion tons of carbon dioxide-equivalent by 2036. Globally, the federal AIM Act assures U.S. compliance with the Kigali Amendment to the Montreal Protocol, which phases down HFCs worldwide and avoids up to a half degree Celsius of projected warming by the year 2100.

AHRI and its member companies have been working diligently over the last several years to amend state building codes to allow use of these substitute refrigerants and avoid any marketplace disruptions as the EPA transition begins. To date, 43 states have the necessary changes to their state building codes, including California, Oregon, and Washington, many using legislation like HB 2654. The few remaining states are in the process of doing so either through legislation or regulatory action.

The most important issue right now is time. New regulations finalized by EPA will significantly restrict the upstream supply of HFCs beginning this year and, separately, prohibit the use of certain HFCs in most new air conditioning and refrigeration product categories in 2025.

As manufacturers start to transition product lines to HFC substitutes, they need to be confident that they can sell products with these HFC substitutes in U.S. markets, including Hawaii. The most significant barrier manufacturers face is the state's building code.

HB 2654 amends Hawaii's building code to allow any HFC substitute that has already been approved by EPA to be used in air conditioning and refrigeration equipment. If this change is not made quickly, manufacturers will face significant risk of being unable to sell new air conditioning and refrigeration equipment into the state as the new EPA regulations take effect. HB 2654 does not make any other change to state law; it simply removes a barrier to ensure Hawaii consumers and businesses enjoy uninterrupted access to new HVACR equipment with the latest, most advanced, and most climate-friendly technologies available.

Thank you again for the opportunity to present testimony. AHRI looks forward to continuing to work with the Hawaii legislature to achieve both the economic and environmental benefits of the phase down of HFCs.

**Hawaii
Legislative
Council
Members**

Joell Edwards
Wainiha Country
Market
Hanalei

Russell Ruderman
Island Naturals
Hilo/Kona

Dr. Andrew Johnson
Niko Niko Family
Dentistry
Honolulu

Robert H. Pahia
Hawaii Taro Farm
Wailuku

Maile Meyer
Na Mea Hawaii
Honolulu

Tina Wildberger
Kihei Ice
Kihei

L. Malu Shizue Miki
Abundant Life
Natural Foods
Hilo

Kim Coco Iwamoto
Enlightened Energy
Honolulu

Chamber of
Sustainable
Commerce
P.O. Box 22394
Honolulu, HI
96823



Rep. Linda Ichiyama, Chair
Rep. Mahina Poepoe, Vice-Chair
Comm. on Water & Land

Rep. Nicole E. Lowen, Chair
Rep. Elle Cochran, Vice-Chair
Comm. on Energy & Environmental Protections

Tuesday, February 6, 2024
9:05 AM Via Videoconference

RE: **HB2654** Sidestepping County's Right to Protect Its Residents and
Natural Resources from harmful Chemicals - **Oppose**

Dear Chairs Ichiyama & Lowen, Vice Chairs Poepoe & Cochran & Members
of both Committees,

The Chamber of Sustainable Commerce represents over 100 small
businesses across the State of Hawaii that strive for a triple bottom line:
people, planet and prosperity; we know Hawaii can strengthen its economy
without hurting workers, consumers, communities or the environment.

This is why we oppose HB2654, which would effectively prohibit state or
county building codes from prohibiting the use of harmful refrigerants if
international chemical corporations successfully lobbied the US EPA to
keep their refrigerants on the EPA's approved list.

Chlorofluorocarbons (CFCs) were once widely used as refrigerants,
propellants in aerosol products, and solvents. They were initially considered
safe and effective by the EPA. However, research eventually linked CFCs to
the depletion of the ozone layer, leading to the development of the
Montreal Protocol in 1987, an international agreement to phase out the
production and consumption of ozone-depleting substances, including
CFCs.

Another example of a harmful chemical that was approved by the US EPA is
DDT (dichlorodiphenyltrichloroethane), which was initially praised for its
effectiveness in controlling insect vectors of diseases like malaria. However,
it was later discovered to have harmful effects on wildlife and the
environment, leading to its ban in the United States.

Just remember the US EPA is only as protective of the environment as the
next president is corruptible and careless in selling out the health of our
planet to chemical corporations. We should put more trust in our local
County Councils and Mayors to be more responsive to new scientific data
and to protect their families and communities first and foremost.



Shaping Tomorrow's
Built Environment Today

180 Technology Parkway, NW • Peachtree Corners, GA 30092-2977 • Tel: 404.636.8400 • Fax: 404.321.5478
www.ashrae.org

Ginger Scoggins
2023-2024 ASHRAE President

Engineered Designs, Inc.
1151 SE Cary Pkwy., Ste. 200
Cary, NC 27518
Phone: (919) 851-8481
Email: gscoggins@engineereddesigns.com

February 5, 2024

The Honorable Linda Ichiyama
The Honorable Mahina Poepoe
House Committee on Water and Land
Hawai'i State Capitol
415 South Beretania St.
Honolulu, HI 96813

Letter sent via email to:
repichiyama@capitol.hawaii.gov
reppoepoe@capitol.hawaii.gov

Re: HI HB 2654 "Relating To Building Codes

Dear Representative Ichiyama and Representative Poepoe:

I am writing on behalf of ASHRAE, the American Society of Heating Refrigerating, and Air Conditioning Engineers, to **support Hawaii House Bill 2654**, titled "Relating to Building Codes" that sits before you in the House Committee on Water and Land. ASHRAE, founded in 1894, is a global professional society of more than 53,000 members, including over 250 in Hawaii, that focuses on building systems, energy efficiency, indoor air quality, refrigeration, and sustainability. Through our research, standards writing, publishing, certification, and continuing education, ASHRAE shapes tomorrow's built environment today.

Current federal law provides that, to the extent practicable, certain ozone-depleting substances must be replaced by chemicals, product substitutes, or alternative manufacturing processes that reduce risks to human health and the environment. The U.S. Environmental Protection Agency is required to promulgate administrative rules identifying acceptable alternatives to these ozone-depleting substances. A 5165 provides that no state agency and no local governmental unit may prohibit or limit the use of a refrigerant that the EPA has designated as acceptable for use.

This legislation will therefore allow manufacturers to adhere to the most recent editions of ASHRAE standards concerning the classification and safe use of refrigerants in heating, air-conditioning, and refrigeration equipment. ASHRAE Standard 15-2022, *Safety Standard for Refrigeration Systems*, specifies the safe design, construction, installation, and operation of refrigeration systems. It applies to mechanical and absorption refrigeration systems; to modifications including replacement of parts or

components; and to substitutions of refrigerant with a different number designation. Standard 15-2022 is used in conjunction with ANSI/ASHRAE Standard 34-2022, *Designation and Safety Classification of Refrigerants*, which specifies refrigerant properties and a refrigerant classification system. It assigns safety classifications and refrigerant concentration limits based on toxicity and flammability data.

In short, this bill will both ensure that the state code aligns with these widely used safety standards, and also provide a clear regulatory framework for HI businesses and residents.

We appreciate your consideration of ASHRAE's comments regarding HI HB 2654. We strongly believe that this legislation will enable a smooth transition in refrigerant use and create a clear regulatory environment for businesses in Hawaii. If you have any questions or need additional information, please feel free to contact GovAffairs@ashrae.org. Thank you for your work to improve the built environment and improve the lives of Hawaii's residents.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ginger Scoggins', written in a cursive style.

Ginger Scoggins
ASHRAE President

HB-2654

Submitted on: 1/31/2024 7:17:15 PM

Testimony for WAL on 2/6/2024 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Justin Silva	Individual	Support	Written Testimony Only

Comments:

the purpose of this Act is to clarify that no state or county building code shall prohibit the use of a substitute refrigerant allowed by the Environmental Protection Agency if the applicable equipment is listed and installed in compliance with the latest safety standards.

HOUSE COMMITTEE ON WATER AND LAND
HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Hearing on February 6, 2024 at 9:05 am

SUPPORTING HB 2654

My name is John Kawamoto, and I support HB 2654.

Hydrofluorocarbons (HFCs) pose a significant threat to the livability of the planet because of their global warming potentials that are thousands of times more potent than carbon dioxide in contributing to climate change. HFCs are commonly used in air conditioning, refrigeration, insulating foam, and as propellants. Safer alternatives to HFC refrigerants have been developed, and now building codes must be updated to facilitate the transition to these alternatives. This bill clarifies that State and county building codes may not prohibit the use of a substitute refrigerant allowed by the EPA.

I urge the joint committee to pass HB 2654.

HB-2654

Submitted on: 2/4/2024 10:56:35 PM

Testimony for WAL on 2/6/2024 9:05:00 AM

Submitted By	Organization	Testifier Position	Testify
Paul Bernstein	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Ichiyama and Lowen, Vice Chairs Poepoe and Cochran, and Members of the Committees on Water and Land and Energy and Environmental Protection:

I am testifying in strong support of HB2654 because high global warming gases, such as HFCs, are a significant cause (estimated to be 10% and growing) of the climate crisis. We must take whatever steps we can to reduce the use of these gases in refrigeration and air conditioning. As the EPA begins to approve safe substitutes for existing HFCs, these replacements should be allowed throughout the country. This bill would clarify that no State or county building code would prohibit the use of a substitute refrigerant allowed by the EPA.

Please pass this bill out of your committees.

Mahalo,

Paul Bernstein