

**STATE OF HAWAII
DEPARTMENT OF HEALTH**

P. O. Box 3378
Honolulu, HI 96801-3378
doh.testimony@doh.hawaii.gov

**Testimony in SUPPORT of HB 2492, HD 1
RELATING TO HYDROFLUOROCARBONS**

REPRESENTATIVE ROY M. TAKUMI, CHAIR
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Hearing Date: 2/13/2020 Room Number: 329

1 **Fiscal Implications:** This measure may impact the priorities identified in the Governor's Executive
2 Budget Request for the Department of Health's (Department) appropriations and personnel priorities.
3 This measure will increase demand on the Department's resources.

4 **Department Testimony:** The Department supports this bill with comments and offers
5 amendments.

6 The bill proposes to establish a new program within the Department to regulate
7 Hydrofluorocarbons (HFCs) that impact climate change. The Department supports the phasing
8 out of HFCs with lower global warming potential alternatives to reduce greenhouse gas
9 emissions and help mitigate the effects of climate change. This bill aligns with many of
10 Hawaii's climate change goals and priorities and would move Hawaii forward in an area where
11 federal action has stalled. This measure would also align Hawaii's efforts with, and enable
12 Hawaii to benefit from the expertise of the many other states of the U.S. Climate Alliance
13 currently developing a model rule to reduce HFCs.

14 **Offered Amendments:** The Department respectfully recommends that §342-F on page 11
15 regarding penalties be removed as Hawaii Revised Statutes (HRS) chapter 342B,
16 Sections 342B-42, 47, 48, and 50 already contain provisions covering air pollution enforcement
17 and penalties for violations of HRS 342B. Therefore, the addition of §342-F is redundant and
18 unnecessary. In addition, removing this section in the bill would be consistent with other U.S.
19 Climate Alliance states developing the model rule.

20 Thank you for the opportunity to testify on this measure.

DAVID Y. IGE
GOVERNOR



SARAH ALLEN
ADMINISTRATOR
BONNIE KAHAKUI
ASSISTANT ADMINISTRATOR

**STATE OF HAWAII
STATE PROCUREMENT OFFICE**

P.O. Box 119
Honolulu, Hawaii 96810-0119
Tel: (808) 586-0554
email: state.procurement.office@hawaii.gov
<http://spo.hawaii.gov>
Twitter: [@hawaiispo](https://twitter.com/hawaiispo)

TESTIMONY
OF
SARAH ALLEN, ADMINISTRATOR
STATE PROCUREMENT OFFICE
TO THE HOUSE COMMITTEE
ON
CONSUMER PROTECTION & COMMERCE

February 13, 2020, 2:00 P.M

HB2492 HD1
RELATING TO HYDROFLUOROCARBONS

Chair Takumi, Vice Chair Ichiyama, and members of the committee, thank you for the opportunity to submit testimony on HB2492 HD1. The State Procurement Office (SPO) appreciates the intent of the bill, however, the bill is asking for a preference when it is mandating it at the same time.

Similar to a recent implementation of a phased-in program for Hawaiian Plant Landscaping requirements, this bill should mandate specifications only and remove the preference, which would be extremely difficult to implement.

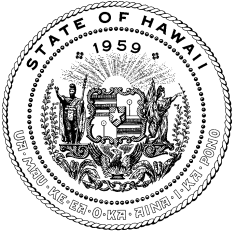
The language, in its entirety, in Section 3 does not belong in the procurement statute. Where the procurement code should be used for general policy, specifications are particular to a subject-specific chapter such as the chapter governing "Energy, Resilience and Sustainability." It is important to maintain this general policy to keep the Code streamlined, rather than becoming a catch-all for any and all subject-specific requirements and specifications.

The Procurement Planning Board (PPB), pursuant to HRS §103D-201(b), consists of the State Comptroller, a county procurement professional, a federal procurement professional, 2 health and human services professionals, and two other persons with significant procurement experience. With the exception of the State Comptroller's position on the board, the PPB consists of volunteer members. While members of the PPB are required to meet certain qualifications under HRS §103D-202 expertise in the field of hydrofluorocarbons is not one of them, and there is no staff member at the SPO who specializes in hydrofluorocarbons.

If the Legislature mandates the PPB engage in promulgating rules for hydrofluorocarbons, then significant funding and resources will be needed, since this function has not been funded by the Legislature in the past. The PPB does not have the resources to develop these rules. HRS §103D-201(c) states, "...The policy board shall be assisted by employees of the department of accounting and general services, which shall provide at least one full-time support staff and funding necessary to support the policy board..." This staff position has never come to pass and therefore it would fall to the SPO to assist in drafting these rules.

Therefore, if Rules need to be promulgated, SPO will require a consultant to develop these Rules. Our experience shows that this cost would be approximately \$500,000.

Thank you



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5TH Floor, Honolulu, HI 96813 | energy.hawaii.gov

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

(808) 587-3807

Testimony of **SCOTT J. GLENN, Chief Energy Officer**

before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Thursday, February 13, 2020
2:00 PM
State Capitol, Conference Room 329

in SUPPORT of **HB 2492, HD1** **RELATING TO HYDROFLUOROCARBONS.**

Chair Takumi, Vice Chair Ichiyama, and Members of the Committee, the Hawaii State Energy Office (HSEO) supports HB 2492, HD1, which establishes regulations on the use of hydrofluorocarbons in state law. The bill also 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; and directs the HSEO 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.

According to the Hawaii Department of Health Greenhouse Gas Inventory for 2016 (published this year),

“hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) are used as alternatives to ozone depleting substances (ODS) that are being phased out under the Montreal Protocol and the Clean Air Act Amendments of 1990. These chemicals are most commonly used in refrigeration and air conditioning equipment, solvent cleaning, foam production, fire extinguishing, and aerosols. In 2016, emissions from ODS substitutes in Hawaii were 0.77 MMT [million metric tons] CO₂ equivalent, accounting for **99 percent of IPPU sector emissions**. Nationally, emissions from ODS substitutes have risen dramatically since 1990, and now represent one of the largest sources of GHG emissions from the [Industrial Processes and Product Use] sector (EPA 2018a).”

Furthermore, in recognition of this national need for action, many U.S. states are taking steps to address HFCs such as sharing technical expertise through the U.S. Climate Alliance. The Alliance is a bipartisan coalition of U.S. states that represents 55 percent of the U.S.

population and an \$11.7 trillion economy – an economy larger than all countries but the U.S. itself and China. The climate and clean energy policies in Alliance states have attracted billions of dollars of new investment and helped create more than 1.7 million clean energy jobs, over half the U.S. total. In 2018, the Alliance published a [roadmap for states to reduce short-lived climate pollutants such as HFCs](#). Taking legislative action such as this is consistent with other U.S. states, thus creating a common set of standards for a more unified market across the country.

The HSEO supports its role in conducting a study with the Department of Health and the integration of substitutes into the state building code. The HSEO defers to and is ready to work with state agencies on how best to implement their responsibilities identified in the bill.

Thank you for the opportunity to testify on this bill.

HB-2492-HD-1

Submitted on: 2/11/2020 11:44:09 AM

Testimony for CPC on 2/13/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jessica Olson	Honeywell	Support	No

Comments:

Honeywell supports HB 2492 HD1, which bolsters adoption of advanced American technologies by businesses. However, we would encourage the committee to align the transition dates in the bill with the four other states that have enacted similar legislation.

Hydrofluorocarbons (HFCs) are used throughout the world as refrigerants in air conditioning to cool cars, homes and buildings, in home and commercial refrigeration, in foam insulation, and as aerosol propellants and solvents. While efficient, many HFC products have high global-warming-potential. Because HFCs are used in everyday life, replacing these products with next-generation alternatives can make a positive impact on the environment and human health.

Replacing HFCs with better alternatives is key to achieving greenhouse gas emissions reductions in Hawaii. Globally, replacing HFCs with low-global-warming-potential (or GWP) alternatives could avoid up to 0.5 degrees Celsius of warming by the end of the century.

American industry has invested well over \$1 billion domestically and employed more than 700,000 US workers to research, develop and implement alternative solutions to high-GWP HFCs. This includes newly constructed manufacturing hubs in the United States to produce such alternatives. This bill will help drive a transition to the low-GWP solutions and promote US leadership in innovation and manufacturing.

Because of this investment, **cost-effective, near drop-in alternatives to HFCs are commercially available today and are ready for widespread adoption.** In addition to lower GWP, technologies using environmentally preferable HFC alternatives are often also more energy efficient than traditional systems, and thus lower customer costs and increase competitiveness. Honeywell continues to work with our customers to ensure a smooth transition to these advanced technologies.

In 2015 and 2016, under the Significant New Alternatives Policy (SNAP) program US EPA established practical and reasonable timelines to transition the industry from outdated HFCs to safer next-generation alternative solutions on a clear and predictable schedule. However, litigation has undermined the SNAP timeline, upending a consistent federal approach to the HFC phasedown.

So states must take a lead on this essential initiative and with this bill Hawaii is seizing the opportunity to build upon growing state-level efforts.

California has already adopted SNAP transition dates, which took effect in 2018 and Washington state, Vermont, and New Jersey have recently adopted similar bills. New York, Connecticut, Colorado, Delaware, Maine, Massachusetts, Maryland, Pennsylvania, and Oregon are also taking similar actions. By passing this bill, Hawaii can take meaningful action to meet its environmental goals while also supporting American innovation and job creation within the United States.

For these reasons, Honeywell supports HB 2492 HD1. However, we would urge the committee to adjust the transition dates in the current bill as follows so as to align Hawaii's program with the four other states that have enacted similar legislation, and the many others that are developing similar regulatory programs. Different transition dates for the same products in different states could lead to added complexity for industry as they try to implement smooth transition across states.

(2) January 1, 2022 [2021], for:

(A) Refrigerated food processing and dispensing equipment;

(B) Compact residential consumer refrigeration products;

(C) Polystyrene extruded boardstock and billet, and rigid polyurethane low-pressure two component-spray foam; and

~~(D) Vending machines~~

(3) January 1, 2023 [2022], for residential consumer refrigeration products other than compact and built-in residential consumer refrigeration products and VENDING MACHINES;

(4) January 1, 2023, for cold storage warehouses;

(5) January 1, 2024, for built-in residential consumer refrigeration products, centrifugal chillers, and positive displacement chillers; and

(6) On either January 1, 2022 [2021], or the effective date of the restrictions identified in appendix U or V, subpart G of title 40 Code of Federal Regulations part 82, as those read on January 3, 2017, whichever comes later, for all other applications and end uses for substitutes not covered by the categories listed in paragraphs (1) through (5).

Thank you for the opportunity to provide testimony. We look forward to working with you on this important effort.

HB-2492-HD-1

Submitted on: 2/11/2020 3:34:33 PM

Testimony for CPC on 2/13/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Stuart Coleman	WAI: Wastewater Alternatives & Innovations	Support	No

Comments:

Dear Chair & Committee Members,

I am writing in support of this Bill to reduce chlorofluorocarbons in refrigerants because this is a damaging Greenhouse Gas, and Hawaii is especially vulnerable to Climate Change & Sea Level Rise. Mahalo for your consideration.

Aloha,

Stuart Coleman, Exec. Dir., WAI

2927 Hibiscus Pl., Hon., HI 96815

TESTIMONY

Christina Theodoridi
Technical Analyst, Climate & Clean Energy Program

On Behalf Of
THE NATURAL RESOURCES DEFENSE COUNCIL

Before the Hawaii State Legislature
House Committee on Consumer Protection & Commerce

IN SUPPORT OF HB 2492
An Act Concerning the Reduction of Greenhouse Gas Emissions from
Hydrofluorocarbons

February 13, 2020



Chair Takumi, Vice Chair Ichiyama and members of the committee,

Thank you for the opportunity to provide testimony in support of HB 2492, on behalf of the Natural Resources Defense Council (NRDC). My name is Christina Theodoridi and I am a technical analyst working on state-level HFC action.

NRDC is a non-profit environmental advocacy organization with a network of 3 million members and online activists. NRDC has worked for several decades on the international, national and state levels to end the use of refrigerants that deplete the ozone layer and cause climate change.

NRDC would like to express strong support for HB 2492.

Hydrofluorocarbons (HFCs) are powerful climate forcers with a heat-trapping capacity thousands of times larger than that of carbon dioxide. That means that even in small concentrations they significantly harm the climate – and their emissions are growing quickly worldwide.

This legislation adopts into state law two U.S. Environmental Protection Agency regulations prohibiting HFCs in uses where safer alternatives are available. An adverse court decision, in response to lawsuits from a couple of companies that were lagging in technology innovation, has led to the EPA rules being vacated. Hawaii should enact this bill to keep those important regulations in force in the state.

Several other states are stepping up to fill the gap. We've worked closely with California, Washington, Vermont and New Jersey, all of which have already enacted legislation very similar to the bill being considered today. We are also providing technical expertise to an additional 10 states that are currently tackling HFC emissions.

These rules prohibit the use of high-GWP HFCs in the applications governed by the former EPA rules, which include aerosol products, foam blowing agents, commercial and residential food refrigeration equipment, and building chillers. Manufacturers are thus obligated to sell products that use one of the several alternatives that EPA has approved for each of these uses. The EPA continues to evaluate potential alternatives.

NRDC supports the original transition schedule.

The prohibitions do not come into effect simultaneously. The bill provides a transition schedule that progressively prohibits the use of these climate-warming chemicals in new or retrofitted products and equipment. The dates in the original bill are sensible and should not be delayed. They are largely consistent with the transition schedules being adopted by other states, which will facilitate enforcement and ease the compliance burden on manufacturers and distributors. **The EPA effective dates have already been pushed back by several years and there is absolutely no room for further delays.** The industry has had ample time to prepare for this transition. Further delaying the schedule will penalize the companies at the forefront of innovation.

NRDC requests that the effective dates be amended, to maximize the climate benefit and ensure consistency with other states.

The majority of HFC-containing products and equipment continue to emit for the entirety of their useful life. Prompt action will avoid the risk of locking in HFC emissions in the state for decades to come and will ensure that the market transitions to better, more efficient alternatives.

The market is ready to transition and the U.S. Climate Alliance states acting to curb HFC emissions are striving to remain consistent. We strongly encourage you to align Hawaii's transition schedule with that of other states, by **amending section (d) of §342B-B** as follows:

- (1) January 1, 2021, for:
 - (A) Propellants;
 - (B) Rigid polyurethane applications and spray foam, flexible polyurethane, integral skin polyurethane, flexible polyurethane foam, polystyrene extruded sheet, polyolefin, phenolic insulation board and bunstock; and
 - (C) Supermarket systems, remote condensing units, and stand-alone units;

- (2) January 1, ~~2022~~ 2021, for:
 - (A) Refrigerated food processing and dispensing equipment;
 - (B) Compact residential consumer refrigeration products;
 - (C) Polystyrene extruded boardstock and billet, and rigid polyurethane low-pressure two component-spray foam; and
 - ~~(D) Vending machines;~~

- (3) January 1, ~~2023~~ 2022, for residential consumer refrigeration products other than compact and built-in residential consumer refrigeration products and vending machines;

- (4) January 1, 2023, for cold storage warehouses; for built-in residential consumer refrigeration products

- (5) January 1, 2024, ~~for built-in residential consumer refrigeration products~~, centrifugal chillers, and positive displacement chillers; and

- (6) On either July 1, ~~2022~~ 2021, or the effective date of the restrictions identified in appendix U or V, subpart G of title 40 Code of Federal Regulations part 82, as those read on January 3, 2017, whichever comes later, for all other applications and end uses for substitutes not covered by the categories listed in paragraphs (1) through (5).

We look forward to working with you on this important climate issue. If you have any questions, please do not hesitate to contact me.

Sincerely,



CHRISTINA THEODORIDI

*Technical Analyst
Climate & Clean Energy and International Programs*

NATURAL RESOURCES DEFENSE COUNCIL

1152 15th STREET NW
WASHINGTON, D.C. 20005
M 347 425 2540
E ctheodoridi@nrdc.org

HB-2492-HD-1

Submitted on: 2/11/2020 12:27:47 PM

Testimony for CPC on 2/13/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dyson Chee	Individual	Support	No

Comments:

HB-2492-HD-1

Submitted on: 2/11/2020 2:43:20 PM

Testimony for CPC on 2/13/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support HB2492. Decreasing the use of hydroflurocarbons will help in the fight to mitigate greenhouse gas emissions.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihej, Maui

HB-2492-HD-1

Submitted on: 2/11/2020 8:12:47 PM

Testimony for CPC on 2/13/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Nandoskar	Individual	Support	No

Comments:

Please support HB 2492 HD1 as an important step toward restricting hydrofluorocarbons refrigerants--potent greenhouse gases, in Hawaii. Many other countries, companies and states are successfully transitioning to more benign technologies and so can we here in Hawaii. Paul Hawken's Project Drawdown research team identifies, reviews, and analyzes the most viable solutions to climate change, and shares these findings with the world. In a five-year study of the most impactful solutions to reversing global warming, refrigerant management was number 1. In their book [Drawdown](#), each solution is measured and modeled to determine its carbon impact through the year 2050, the total and net cost to society, and the total lifetime savings (or cost).

Mahalo for caring about our aina and your children and grandchildren's future.

HB-2492-HD-1

Submitted on: 2/12/2020 12:46:06 AM

Testimony for CPC on 2/13/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Severine Busquet	Individual	Support	No

Comments:

Aloha CPC Chair Takumi and Vice Chair Ichiyama

To protect the climate, we need to phase out the extremely potent greenhouse gases in hydrofluorocarbon refrigerants used in air conditioning, refrigerators, aerosol propellants, solvents and foaming agents.

Time to take action is now to hope for a decent future of the next generations.

For these reasons, I strongly support HB2492 HD1.

Thanks for your attention

Severine Busquet

Hawaii Kai, Honolulu

HB-2492-HD-1

Submitted on: 2/12/2020 1:49:04 PM

Testimony for CPC on 2/13/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
sherryl	Individual	Support	No

Comments:

I would like to submit my revised testimony.. It adds in some of the benefits and a few more solutions. Thank you all for doing this important work!

Sherryl Royce.

Refrigerants are the number one contributor to global warming 1

HFCs are extremely powerful, unregulated refrigerants. The most abundant HFC is 1,430 times more damaging to the climate than carbon dioxide 2

The amount of HFCs in the atmosphere is currently small, but even small amounts are extremely destructive. And their emissions are growing by 10-15% per year, [doubling every five to seven years](#) . 2,3

It is predicted that in 2020, globally, 41% of HFCs will be emitted by residential AC and motor vehicle AC (MVAC). 9

Residential AC is predicted to increase four-fold by 2030, from 1.2 billion to 4.5 billion units. Studies predict that the estimated number of MVAC units in developing countries will increase from 200 million units in 2010 to 1 billion units by 2050. Not only will there be this dramatic increase in these units, but due to global warming, these units will be used for longer periods of time. 9,10

HFC emissions from residential AC and MVAC units occur from leakage during use, during servicing, but with 90% of loss occurring at end-of-life disposal. Even after HFCs are replaced with low GWP alternatives, older cars and residential AC units, plus manufactured but unused HFCs will still remain a threat unless disposed of properly.1,9

HFCs can be most effectively controlled through a phase down of their production and consumption. Curbing HFCs can bring climate relief relatively quickly due to its shorter lifespan in the atmosphere. A sufficient worldwide amount of HFCs is necessary for refrigerant blends, which is why this is not a complete phase out of these chemicals. 2,3,7

Solutions

U.S. states are taking the lead in phasing down HFCs. In the U.S. California, Washington and Vermont have already passed legislation and 5 more states are committed to taking action. The response must be swift, and it is the states that are stepping forward. The federal government's will is lacking and its process too slow.⁴

Supermarket companies have taken the lead in industry and are already transitioning to low GWP alternatives for refrigeration.. For example, Target began in 2010 with a CO2 cascade system, and in 2012, Albertson's used a NH3 system in its "Journey to Net-Zero".^{5,6}

Many manufacturers, such as Honeywell and Chemours, are not waiting for the government to act on HFCs. and have already started the transition to alternative refrigerants. They have prior experience with CFCs and HCFCs and are adept at handling these transitions. They want clear guidelines regarding the HFC phase down, and overwhelmingly support ratifying the Kigali Amendment.^{7,8}

One reason for the current challenge is the absence of building and fire codes that would allow for new refrigerants (many of which are flammable) to be more broadly accepted. It is also critical that any HFC phase down align with future efficiency standards and regulations in order to avoid uncoordinated goals that make compliance difficult and inefficient for manufacturers and potentially expensive for end users. ⁷

Improve energy efficiency in homes and buildings and provide financing, subsidies, and other financial incentives to reduce upfront costs for consumers. Efficiency improvements could cut the energy growth from AC demand in half through mandatory energy performance standards ^{10, 12}

EPA should extend air conditioning and refrigeration equipment servicing and disposal requirements under the Clean Air Act for other refrigerants [to HFCs](#) , as well as increase initiatives to capture and recycle HFCs from existing equipment to reduce the amount of new HFCs produced. ¹¹

Benefits

In addition to the direct climate benefits from HFC mitigation, a global HFC phase down could also provide [indirect benefits](#) through improvements in the energy efficiency of the refrigerators, air conditioners, and other products and equipment that use these chemicals. These efficiency gains could also lead to reduced emissions of CO2 and other air pollutants ²

The recent study, Economic Impacts of U.S. Ratification of the Kigali, states that the Kigali Amendment, or phase down of HFCs, gives American companies an advantage in technology, manufacturing, and investment, which will lead to job creation. The economic analysis indicates that U.S. implementation is good for American jobs, and it will both strengthen America's exports and weaken the market for imported products, while enabling U.S. technology to continue its world leadership role .The Kigali

Amendment is projected to increase U.S. manufacturing jobs by 33,000 by 2027, increase exports by \$5 billion, reduce imports by nearly \$7 billion, and improve the HVACR balance of trade. Manufacturing equipment that utilizes non-HFCs could both improve the balance of trade and save American jobs 7

Phase out of CFCs spurred technological development and investment in a new generation of air conditioning and refrigeration equipment, creating [significant benefits](#) to public health and the environment while producing lifetime savings for consumers. EPA found that globally, new products typically [did not cost more than existing ones](#), and some products were actually cheaper to maintain than conventional equipment because of higher efficiencies, product quality and reliability. It's predicted that the same will happen with HFCs 11

1 <https://www.drawdown.org/solutions/materials/refrigerant-management>

2 <https://www.ccacoalition.org/fr/slcp/hydrofluorocarbons-hfc>

3 <https://www.nrdc.org/experts/david-doniger/states-keep-rolling-hfc-phase-down>

4 [https://www.nrdc.org/sites/default/files/media-uploads/fact sheet on state hfc action 0.pdf](https://www.nrdc.org/sites/default/files/media-uploads/fact%20sheet%20on%20state%20hfc%20action%200.pdf)

5 http://www.r744.com/articles/6033/p_why_target_opted_for_co_sub_2_sub_as_its_prototype_p

6 https://www.epa.gov/sites/production/files/documents/GC_Webinar_AmmoniaCascade_2012.11.15.pdf

7 <https://www.achrnews.com/articles/137172-hvacr-manufacturers-aim-to-phase-down-hfcs-regardless-of-regulations>

8 <https://www.reuters.com/article/us-companies-climatechange/u-s-companies-brace-for-climate-friendly-alternatives-in-cooling-systems-idUSKBN12H040>

9 http://www.iifiir.org/userfiles/file/developing-countries/US_Environmental_Protection_Agency/transitioning_to_low-gwp_alternatives_in_motor_vehicle_air_conditioning.pdf

10 <https://insideclimatenews.org/news/11112018/climate-change-home-air-conditioning-half-degree-global-warming-by-2100>

11 <https://www.wri.org/blog/2015/03/reducing-hfcs-us-would-benefit-consumers-and-climate>

12 <https://www.iea.org/news/air-conditioning-use-emerges-as-one-of-the-key-drivers-of-global-electricity-demand-growth>

13 <https://www.epa.gov/ozone-layer-protection/transitioning-low-gwp-alternatives-residential-and-commercial-air>

14 <https://www.ccacoalition.org/en/resources/factsheet-hydrofluorocarbons-key-messages>

HB-2492-HD-1

Submitted on: 2/12/2020 3:33:40 PM

Testimony for CPC on 2/13/2020 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Individual	Support	No

Comments:

HB2492 HD1

NOTICE OF HEARING

DATE: Thursday, February 13, 2020

TIME: 2:00 pm

Conference Room 329

PLACE: State Capitol

415 South Beretania Street

Chair Takumi, Vice Chair Ichiyama, and Consumer Protection and Commerce Committee members:

The Climate Protectors Coalition **strongly supports** HB2492!

We are a new group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, and rising sea levels. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible.

One important way to do so is by reducing emissions of hydrofluorocarbons, very potent greenhouse gases (up to several thousand times CO2!) used as cooling agents in air conditioners and refrigerators and in aerosol propellants, solvents, and foaming agents.

The bill as amended in HD1 is appropriate and the Climate Protectors urge the Committee to pass it. In any event, the Climate Protectors urge the Legislature to take strong action now to restrict these harmful hydrofluorocarbon emissions. Mahalo!