

# SENATE BILL REPORT

## E2SHB 2401

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As of February 24, 2024

**Title:** An act relating to providing for the responsible management of refrigerant gases with a higher global warming potential than carbon dioxide that are used in appliances or other infrastructure.

**Brief Description:** Providing for the responsible management of refrigerant gases with a higher global warming potential than carbon dioxide that are used in appliances or other infrastructure.

**Sponsors:** House Committee on Appropriations (originally sponsored by Representatives Duerr, Doglio, Berry, Fitzgibbon, Ramel and Pollet).

**Brief History:** Passed House: 2/9/24, 57-40.

**Committee Activity:** Environment, Energy & Technology: 2/14/24, 2/20/24 [DPA-WM, DNP, w/oRec].

**Ways & Means:** 2/24/24.

### Brief Summary of Amended Bill

- Requires producers of certain bulk refrigerants and precharged equipment (covered products) to participate in, fund, and implement a refrigerant stewardship program (program), which includes, in part, providing a financial incentive payment for the recovery of refrigerants.
- Prohibits the sale of covered products in or into Washington unless a producer of covered products is participating in a program.
- Grants the Department of Ecology rulemaking and enforcement authority.
- Exempts certain charges relating to a program from the state business and occupation tax.

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.*

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## SENATE COMMITTEE ON ENVIRONMENT, ENERGY & TECHNOLOGY

**Majority Report:** Do pass as amended and be referred to Committee on Ways & Means.  
Signed by Senators Nguyen, Chair; Lovelett, Vice Chair; Lovick, Trudeau and Wellman.

**Minority Report:** Do not pass.  
Signed by Senator Short.

**Minority Report:** That it be referred without recommendation.  
Signed by Senators MacEwen, Ranking Member; Boehnke.

**Staff:** Matt Shepard-Koningsor (786-7627)

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## SENATE COMMITTEE ON WAYS & MEANS

**Staff:** Jed Herman (786-7346)

**Background:** Extended Producer Responsibility and Product Stewardship Programs. The Legislature has enacted laws that require the establishment of product stewardship programs for the management of six types of products: (1) electronic products—2006, (2) mercury-containing light bulbs, such as compact fluorescent lights—2010, (3) photovoltaic solar panels—2017, (4) pharmaceuticals—2018, (5) paint—2019, and (6) batteries—2023.

In general, the state's product stewardship programs require producers to participate in a stewardship organization or program that is responsible for the collection, transport, and end-of-life management of covered products. The Department of Ecology (Ecology) is responsible for overseeing the state's product stewardship programs, with the exception of the Pharmaceutical Stewardship Program, which is overseen by the Department of Health.

Hydrofluorocarbons and Refrigerant Regulations. Hydrofluorocarbons (HFCs) are a category of gases used primarily as refrigerants in a variety of commercial and industrial applications. HFCs are among the greenhouse gases (GHGs) identified by the United States Environmental Protection Agency (EPA) and Ecology because of their capacity to trap heat in the earth's atmosphere. According to EPA, the global warming potential (GWP) of HFCs and other GHGs is measured as a function of how much of the gas is concentrated in the atmosphere, how long the gas stays in the atmosphere, and how strongly the particular gas affects global atmospheric temperatures. Under state law, the GWP of GHGs are measured in terms of their equivalence to the emission of an identical volume of carbon dioxide over a 100-year timeframe. According to EPA, some HFCs can be hundreds to thousands of times more potent than carbon dioxide.

In recent years, the Legislature has established several new regulatory requirements to restrict emissions of HFCs and other refrigerants, including:

- requiring that repair or disposal services of refrigeration equipment use refrigerant extraction equipment to recover unused refrigerants;
- prohibiting the willful release of refrigerants from air conditioning, heating, and refrigeration systems, and consumer appliances;
- establishing a maximum GWP for refrigerants in numerous categories of uses, including foam blowing agents like polyurethane or spray foam, refrigeration equipment, and air conditioning equipment; and
- establishing a refrigerant management program to reduce refrigerant emissions from larger stationary refrigeration systems and larger commercial air conditioning systems.

Ecology has adopted rules to implement many of these requirements, including establishing required service practices for individuals performing the installation, maintenance, service, repair, or disposal of a refrigeration or air conditioning system with a charge of at least 50 pounds and that uses a refrigerant with a GWP of at least 150.

In December 2021 Ecology submitted a report to the Legislature regarding end-of-life refrigerant management, which included recommendations that an end-of-life refrigerant management program be based on several specified principles, including that a program address refrigerant-containing equipment and appliances, and contain provisions for all types of refrigerants, not just HFCs. In addition, Ecology determined that more extensive stakeholder feedback was needed to develop recommendations for an optimally-designed end-of-life refrigerant management program.

Federal Law. In December 2020 the United States Congress enacted the American Innovation and Manufacturing Act of 2020 (AIM Act), establishing federal restrictions on HFCs. The AIM Act, and EPA rules to implement it, establish a phase-down of production and consumption of HFCs in the United States to 15 percent of baseline levels by 2036, with reductions to 60 percent of baseline levels taking effect in 2024, reductions to 30 percent of baseline levels taking effect in 2029, and reductions to 20 percent of baseline levels taking effect in 2034. In addition to the overall phase-down of HFCs, EPA is authorized to adopt regulations to facilitate sector-based transitions to lower-GWP technologies, including through restrictions on the use of certain HFCs, and to adopt regulations to maximize reclamation and minimize releases of HFCs.

Under the federal Clean Air Act, EPA adopted regulations to maximize the recapture and recycling of refrigerants during the maintenance, service, repair, and disposal of appliances and motor vehicle air conditioning systems. The regulations also require the certification of technicians that service, repair, or dispose of equipment that could release refrigerants, who must pass a test to become certified.

Business and Occupation Tax. Washington's major business tax is the business and occupation (B&O) tax. The B&O tax is imposed on the gross receipts of business activities conducted within the state, without any deductions for the cost of doing business. There are

several categories of B&O tax rates applying to businesses engaged in different activities. A taxpayer may have more than one B&O tax rate, depending on the types of business activities conducted. Legislation establishing or expanding a tax preference must include a Tax Preference Performance Statement identifying the public policy objective of the preference, in addition to specific metrics the Joint Legislative Audit and Review Committee can use to evaluate the effectiveness of the preference.

Pollution Control Hearings Board. The Pollution Control Hearings Board (PCHB) is an appeals board with jurisdiction to hear and decide appeals of certain decisions, orders, and penalties issued by Ecology and several other state agencies. Parties aggrieved by a PCHB decision may obtain subsequent judicial review.

**Summary of Amended Bill:** Refrigerant Stewardship Organization Requirements.  
*Relevant Terms.* Covered refrigerants are fluorinated refrigerant gases regulated under other refrigerant laws, including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and HFCs, which are used for heat transfer purposes to provide a heating or cooling effect.

Bulk refers to a covered refrigerant of any amount in a container for the transportation or storage of that substance, such as cylinders, drums, International Organization for Standardization tanks, and small cans, but does not include a covered refrigerant in a manufactured product, such as an appliance, an aerosol can, or a foam.

Precharged equipment means any appliance or refrigeration, air conditioning, or heat pump equipment or other equipment containing a quantity of covered refrigerant already added or charged into the equipment or appliance prior to installation in the field.

A producer of a covered refrigerant is the person or entity who is the first point of sale of the refrigerant in or into Washington. A producer of precharged equipment is determined based on scenarios regarding under what brand the equipment is sold, or whether another person has contractually agreed to be responsible for the equipment.

Several other terms are defined.

*Requirement to Join or Form a Refrigerant Stewardship Organization.* Beginning January 1, 2025, a producer who sells, or otherwise enters into commerce, bulk covered refrigerants or precharged equipment containing a covered refrigerant into Washington must participate in a refrigerant stewardship organization (RSO) and fund its operations. A producer not participating in an RSO may not sell bulk covered refrigerants or equipment in or into Washington.

*Refrigerant Stewardship Organization Plan Components: Generally and Department of Ecology Review.* By May 1, 2027, an RSO must submit a plan to Ecology for review and approval. The plan must, in part:

- include contact information for each producer;
- identify the brands and equipment models of each producer of precharged equipment, and the producers for each type of bulk covered refrigerant;
- propose implementation mechanisms to achieve specified performance measurements and associated calculation methods;
- include information on education and outreach activities;
- describe mechanisms used for collection and consolidation of recovered covered refrigerants;
- identify proposed entities to be used by the RSO for reclamation, destruction, and final disposition of covered refrigerants; and
- include certain additional Ecology-requested information.

Ecology must review a submitted plan within 120 days. In certain cases, Ecology may amend a plan and require an RSO to implement it. An RSO must submit an updated plan at least every five years. In addition, Ecology may require an RSO to submit an updated plan based on a change to the methods of RSO financing, covered refrigerant collection, or end-of-life management that are not covered in the plan.

Beginning January 1, 2028, producers, through an RSO, must implement an approved plan.

*Refrigerant Stewardship Organization Funding.* An RSO must ensure adequate funding is available to fully implement its plan, including funding collection and collection sites, education and outreach, annual reporting, financial incentives, and Ecology's administrative fees.

An RSO must develop and implement a system to collect fees from participating producers in an equitable, environmentally-sound, and socially-just manner. Beginning in 2028, the first year of plan implementation, an RSO must propose an initial rate per pound of covered refrigerant to calculate the participating producers' fees, which must be approved by Ecology based on whether certain performance measurements and other requirements would be achieved. In subsequent years, an RSO may propose a fee adjustment to Ecology based on a performance assessment, which Ecology may approve or choose to adjust the fee on its own.

Beginning in 2031 an RSO may charge a fee based on the GWP of each covered refrigerant. The system of charges must also use eco-modulated fees to encourage lower environmental impacts of covered refrigerants.

Retail establishments, service providers, producers, or RSOs may not charge a point-of-sale fee to consumers to cover the administrative or operational costs of an RSO or the program. An RSO may not use funds collected for purposes of implementing a plan to pay an administrative penalty, for administrative appeals, for litigation between the RSO and the state, or for certain activities regarding lobbying or legislation.

*Financial Incentive Payments for Recovering Covered Refrigerants.* By December 1, 2027, to be eligible for a financial incentive payment (payment) each entity:

- that is not a producer, but that sells, resells, distributes, or otherwise enters into commerce bulk covered refrigerants after the first point of sale must register with an RSO as a partner participant and comply with specified reporting requirements; and
- must be EPA-certified.

An RSO must propose in its plan, a payment to registered partner participants who deliver covered refrigerants to the program. A payment must be made, where appropriate, to the employer of the person delivering the covered refrigerant to the program, but the employer must ensure at least 90 percent of the payment is received by the person delivering the covered refrigerant to the program. An employer may not offset any wage or other amounts owed under any state law, contract, or ordinance when providing at least 90 percent of the value of the payment to the person who furnished the covered refrigerant. The RSO must demonstrate the payment is sufficient to encourage recovery of covered refrigerants and discourage illegal dumping or venting. In developing a payment, an RSO may consider certain criteria regarding the volume of recovered covered refrigerant provided, the type and purity of the refrigerant, and whether the refrigerant was recovered in a cost-effective, environmentally-responsible manner. Ecology may require an RSO to increase the value of a payment if it fails to meet an established performance target.

*Performance Targets.* An RSO must set, and Ecology must review and may approve, reasonable binding interim annual performance targets in addition to and in advance of the 2032 recovery rate target. An RSO must propose and achieve an annual recovery rate of at least 70 percent in 2032 and each subsequent year. Ecology may adjust the annual recovery rate in 2033 and beyond to optimize refrigerant recovery and end-of-life management outcomes.

*Collection and Management.* An RSO must provide for the collection of all covered refrigerants recovered by any person from within the state without charging a collection fee. At a minimum, an RSO must provide statewide opportunities to collect bulk covered refrigerant through at least one permanent collection site in each county, unless granted an infeasibility waiver from Ecology, and through existing commercial sites operated by RSO-participating distributors and wholesalers of covered refrigerants. Additional specified entities may serve as collection sites. Covered refrigerants must be collected and managed consistent with certain federal and state laws. An RSO may suspend or terminate a collection site under certain circumstances and must notify Ecology if it does.

*Education and Outreach.* An RSO must carry out specified promotional activities, including, in part, developing a website, social media advertisements, and educational materials for customers, service technicians, and other public and private entities.

*Reporting and Recordkeeping Requirements.* By June 1, 2029, and each subsequent June 1st, an RSO must submit an annual report to Ecology, which must include:



- an independent financial audit with a breakdown of expenses;
- a summary financial statement covering the financing of the RSO and analyzing program expenses;
- quantitative data regarding program operations;
- certain collection site data;
- education and outreach data; and
- information on specified program changes.

An RSO must submit quarterly updates to Ecology regarding the list of participating producers of covered refrigerants and precharged equipment and the brands and models for such equipment. Additional reporting and recordkeeping requirements apply to distributors and wholesalers regarding covered refrigerants sold to them by participating producers.

Additional Ecology Duties. By December 31, 2026, Ecology must adopt rules to implement, administer, and enforce the act. If EPA updates certain federal standards or amends certain definitions used in the act, Ecology must notify the Legislature and recommend appropriate changes to such definitions to maintain consistency with federal law.

By April 1, 2027, and each subsequent April 1st, Ecology must determine projected annual costs to administer the program and an annual fee amount to be paid by each RSO. By December 31, 2026, Ecology must adopt rules to equitably determine the annual fee payment by an RSO and send notice. If annual payment funds exceed Ecology's costs, it must apply the excess funds to the next fiscal year. If the collected funds are less than Ecology's costs, Ecology must increase the annual payment for the next fiscal year. Fees must be deposited into a new, nonappropriated responsible refrigerant disposal account.

Ecology must post certain information on its website regarding RSOs; participating producers; covered refrigerants, brands, and models of precharged equipment; and plans and annual reports from RSOs. Other procedural requirements regarding RSO plan approval and modifications are specified. If multiple RSOs form to implement plans, and if requested by the RSOs, Ecology may serve as a coordinating body or oversee coordination of RSO plans.

By September 1, 2024, Ecology must appoint specified members from industry, nonprofits, trade associations, and an RSO to a newly-established advisory council. The advisory council may consider, among other things:

- methods to best achieve RSO performance targets;
- methods to improve the accuracy of the recovery rate calculations as part of a plan;
- reasonable and achievable improvements for the collection of covered refrigerant;
- how incentive structures may be improved to maximize the collection of covered refrigerant by service technicians;
- methods to streamline, where possible, registration, certification, and reporting requirements to minimize conflict, overlap, and duplication with existing state and

- federal laws;
- best practices currently being used in the industry; and
- potential additional collection site locations.

Confidential Information and Enforcement. An RSO may request that information or records be made available only for the confidential use of Ecology. If a person violates the new provisions, Ecology may impose a daily civil penalty in an amount of up to \$1,000 for a first violation and up to \$10,000 for subsequent violations. Before imposing penalties, Ecology must provide a written warning to the person for the first violation. Penalties may be appealed to the PCHB and must be deposited into the Model Toxics Control Operating Account.

Retail Establishments Selling Precharged Equipment. Beginning July 1, 2028, retail establishments may not sell, offer for sale, install, or otherwise provide precharged equipment to customers unless the producer responsible for the equipment participates in an RSO. A retail establishment selling equipment is not required to serve as a collection site for covered refrigerants but must comply with collection site requirements if it does agree to serve as a collection site. Retail establishments selling or offering equipment must provide specified information to customers regarding available end-of-life management options for covered refrigerants.

Other. Receipts of an RSO from charges to participating producers and payments received by partner participants are exempted from the B&O tax. The tax preference is not subject to an expiration date and does not require a tax preference performance statement.

Producers and RSOs are granted limited immunity from state antitrust laws for certain activities related to the stewardship program.

Legislative intent language and a state severability clause are included.

#### **EFFECT OF ENVIRONMENT, ENERGY & TECHNOLOGY COMMITTEE AMENDMENT(S):**

- Specifies that, when defining covered refrigerant, the term includes a fluorinated substitute in addition to a fluorinated regulated refrigerant.
- Prohibits an employer, as newly-defined, from offsetting any wage or other amounts owed under any state law, contract, or ordinance when providing the payment to the person who furnished the covered refrigerant.
- Removes references to transportation costs in provisions relating to an RSO reimbursing collection sites, and when an RSO submits certain financial information.
- Establishes an advisory council, consisting of specified Ecology-appointed members, to consider certain topics, including, in part: (1) methods to best achieve refrigerant recovery performance targets; (2) reasonable and achievable improvements for the collection of covered refrigerant; (3) how incentive structures may be improved to



- maximize the collection of covered refrigerant by service technicians; and (4) potential additional collection site locations.
- Removes duplicative language regarding certain RSO charges exempted from the B&O tax.
- Makes other technical changes.

**Appropriation:** None.

**Fiscal Note:** Available.

**Creates Committee/Commission/Task Force that includes Legislative members:** No.

**Effective Date:** Ninety days after adjournment of session in which bill is passed.

**Staff Summary of Public Testimony on Engrossed Second Substitute House Bill (Environment, Energy & Technology):** *The committee recommended a different version of the bill than what was heard.*

**PRO:** Since many appliances using refrigerants are going to be in-service for many years, it is incumbent upon us to recycle these refrigerants. We need to have a program in place to incentivize the collection of these refrigerants, of which we are currently only collecting 18 percent. This bill is a cost-effective way to reduce climate change from these super pollutants and fills a gap in how we currently regulate them. We want technicians to be incentivized to recover refrigerants, and this bill makes economic sense. Refrigerants account for most of our greenhouse gas emissions and we support this bill for business and environmental reasons. This bill will help ensure we have the refrigerants needed for existing systems as HFCs are phased-down. It is critical to improve refrigerant management to prevent atmospheric release. With an extended producer responsibility program, the business can decide how to best operate and provide the incentive.

**CON:** We have concerns about the impact on specific technicians who would be recovering refrigerant. This adds a layer of bureaucracy to something that may be working. We have concerns with how this product stewardship would work. We do not want to add costs to these refrigerants. We want to involve other industry members to work most effectively. It should be based on the date of manufacture and not the first point-of-sale. I am interested in learning of a program that would incentivize an activity that is a crime. This will increase the price of air conditioners and heat pumps.

**OTHER:** We would like to be involved in this process because our members use produce coolers.

**Persons Testifying (Environment, Energy & Technology):** **PRO:** Representative Davina Duerr, Prime Sponsor; Richie Kaur, Natural Resources Defense Council; Mike Wenrick, PCC Community markets; Heather Trim, Zero Waste Washington; Mike Armstrong, A-Gas; Christina Starr, Environmental Investigation Agency; Joel Creswell, Washington State

Department of Ecology; Kate White, Hudson Technologies.

CON: Jacob Cassady, Association of Home Appliance Manufacturers; Carolyn Logue, Washington Air Conditioning Contractors Association; Aaron Larson, Gensco, Inc.; Peter Godlewski, Association of Washington Business.

OTHER: Mark Streuli, Washington Potato and Onion Association.

**Persons Signed In To Testify But Not Testifying (Environment, Energy & Technology):** No one.

**Staff Summary of Public Testimony on Bill as Amended by Environment, Energy & Technology (Ways & Means):** PRO: On behalf of community grocery co-ops in the Puget Sound region, refrigeration is key to food safety. If the price of refrigerants spikes, it could impact the cost of food. We think it's better to pay a predictable price on refrigerants to ensure we have enough supply in the future. We worry about shortages as the Environmental Protection Agency cuts production by 40 percent this year. This program complements the reductions that are occurring from the baseline. There will be a massive shortage of refrigerants without aggressive reclamation. This is a strong bill because it focuses on reclaiming material rather than destroying it. The bill is an urgent, must-pass climate imperative to avoid a major climate bomb from entering our atmosphere. As we phase down production of new hydrofluorocarbons, this bill will ensure a steady supply of recycled refrigerants for the benefit of industry and households while also preventing them from being released in the atmosphere.

CON: We are opposed to the bill because this is a 30-page bill that involves a lot of processes that have not been put in place anywhere else in this country. Trying to model off Australia is not an appropriate comparison. This bill is unnecessary because there are already market-based incentives happening through our manufacturers and distributors across the state. We would appreciate making this bill a study. We have had one meeting to stakeholder the bill, which is not enough. Our independent and rural groceries are already dealing with Ecology's refrigerant management requirements. They will continue to be dependent on re-claimed gas and need it to remain affordable. Nothing in this bill gives assurance that the costs will be less or even the same if a product stewardship program is put in place. This bill deserves careful thought before putting it into law. We think there needs to be a strong voice for the industry and identification of ways to avoid duplication. If the concern is with bulk refrigerants, than that should be the legislative intent.

OTHER: We thought this issue was already covered under the program at Ecology. We concur that the capture of these refrigerants is important, but we would have liked to work collaboratively on this bill to bring a bill forward that everyone can support. This bill would result in a \$5 million hit to the potato and onion industry. We are concerned with those costs and want to work with others to minimize the costs to food producers.

**Persons Testifying (Ways & Means):** PRO: Joanna Grist, PCC Community Markets;

Mike Armstrong, A-Gas; Christina Starr, Environmental Investigation Agency.

CON: Jacob Cassady, Association of Home Appliance Manufacturers (AHAM); Carolyn Logue, Washington Air Conditioning Contractors Association; Peter Godlewski, Association of Washington Business.

OTHER: Katie Beeson, Washington Food Industry Assoc; Mark Streuli, Washington Potato and Onion Association.

**Persons Signed In To Testify But Not Testifying (Ways & Means):** No one.