SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Blakespear, Chair
2025 - 2026 Regular

Bill No:	SB 1010		
Author:	Ashby		
Version:	3/25/2026	**Hearing Date:**	4/22/2026
Urgency:	No	**Fiscal:**	Yes
Consultant:	Alyssa Poletti		

SUBJECT: Solid waste: Refrigerant Stewardship and Recovery Act

DIGEST: This bill establishes an Extended Producer Responsibility (EPR) program for household appliances containing refrigerants.

ANALYSIS:

Existing Federal law:

1) Requires technicians who maintain, service, repair, or dispose of equipment that could release refrigerants to be certified. (Section 608 of the Clean Air Act; Title 40 of the Code of Federal Regulations (CFR) Part 80, Subpart F)

Existing State law:

2) Establishes a state recycling goal of 75% of solid waste generated to be diverted from landfill disposal through source reduction, recycling, and composting under the Integrated Waste Management Act of 1989 (IWMA; AB 939 (Sher)).
   a) Requires each state agency and each large state facility to divert at least 50% of all solid waste through source reduction, recycling, and composting activities. (Public Resources Code (PRC) §§ 41784, 41786)

3) Establishes the Plastic Pollution Prevention and Packaging Producer Responsibility Act (SB 54 (Allen), Chapter 75, Statutes of 2022) which requires the following of single-use plastic packaging and food service ware:
   a) 65% of covered materials be recyclable or compostable by 2032;
   b) To be considered recycled, covered materials must be sent to a responsible end market defined as "a materials market in which the recycling and recovery of materials or the disposal of contaminants is conducted in a way that benefits the environment and minimizes risks to public health and worker health and safety;"
   c) The creation of a Producer Responsibility Organization (PRO) to implement the requirements of this act; and

   d) An eco-modulated fee structure where producers pay a lower fee to the PRO if a covered material that is easier and less expensive to recycle or compost (PRC § 42040 et seq.)

4) Defines a certified reclaimed refrigerant as a refrigerant reclaimed by a refrigerant reclaimer certified by the United States EPA and containing no greater than 15% new hydrofluorocarbon refrigerant (AB 663 (McKinnor), Chapter 161, Statutes of 2025; Health and Safety Code (HSC) § 39735(a)(2))

5) Prohibits the sale or distribution of bulk hydrofluorocarbons that exceed a specified global warming potential except for certified reclaimed refrigerants by the following dates:
   a) the global warming potential shall not exceed 2,200 by January 1, 2025;
   b) the global warming potential shall not exceed 1,500 by January 1, 2030;
   c) the global warming potential shall not exceed 750 by January 1, 2033. (AB 663, McKinnor, Chapter 161, Statutes of 2025; HSC § 39735(b))

6) Defines hydrofluorocarbons as a greenhouse gas through the California Global Warming Solutions Act of 2006. (AB 32 (Nunez), Chapter 488, Statutes of 2006; HSC § 38505(g))

7) Requires a 40% reduction in statewide hydrofluorocarbon emissions below 2013 levels by 2030. (SB 1383 (Lara), Chapter 395, Statutes of 2016)

This bill:

1) Defines covered products as the following, when not used for industrial, commercial, or medical use:
   a) Refrigerators;
   b) Freezers;
   c) Combination refrigerator-freezers;
   d) Window air conditioners;
   e) Portable air conditioners;
   f) Dehumidifiers;
   g) Wine or beverage coolers; and
   h) Any other consumer appliance designated by CalRecycle.

2) Defines producers as the following:
   a) A person who manufactures a covered product;
   b) A person who owns or is the licensee of the brand or trademark under which a covered product is sold or distributed for sale in the state;

c) If not (a) or (b), a person who imports the covered product into the state for sale or distribution
d) If not (a), (b), or (c), the distributor, retailer, or wholesaler who sells the product in the state.

3) Uses the definition of a responsible end market from SB 54 (Allen). (PRC § 42041)

4) Requires producers of covered materials to join a Producer Responsibility Organization (PRO) by July 1, 2028.

5) Requires the following of the PRO:
   a) Submit an application to operate to CalRecycle by January 1, 2028;
   b) Submit a producer responsibility plan to CalRecycle within a year of final rulemaking which is to be completed by January 1, 2029;
   c) Complete the producer responsibility plan including the following by January 1, 2031:
      i) Information on the producers and brands covered under the plan;
      ii) A description of the PRO funding using a per unit eco-modulated fee;
      iii) A five-year budget including estimate revenues, costs, and a reserve fund;
      iv) Be in the public record; and
      v) A description of how the PRO will achieve the following:
         a) Provide free and convenient drop off collection sites, how these sites will be authorized and managed, and how local jurisdictions can request a collection site;
         b) Provide, at no cost, the transportation of covered products from a collection site to an authorized sorter, authorized repair business, or recycling facility;
         c) Maximize the reuse and recycling of covered products and minimize disposal;
         d) Ensure reused and recycled covered products have economically viable end markets;
         e) Address the presence of PFAS in covered products; and
         f) Maintain minimum refrigerant recovery standards and take all reasonable precautions to prevent accidental release of refrigerant.
   d) Have a governing board;
   e) Demonstrate adequate financial responsibility;
   f) Approve or terminate collection sites;
   g) Maintain a reserve fund sufficient to operate the PRO for six months;

   h) Pay CalRecycle fees to cover the PRO's oversight and regulatory costs which will be deposited into the Refrigerant Stewardship Recovery Fund;
   i) Review their producer responsibility plan every 5 years.

6) Requires CalRecycle to do the following:
   a) Develop regulations in consultation with the Department of Toxic Substance Control (DTSC);
   b) Approve a PRO by March 1, 2028 and approve a producer responsibility plan by January 31, 2031; and
   c) Establish, review, and adjust performance standards.

7) Allows CalRecycle to approve additional PROs after January 1, 2035.

8) Establishes a $10,000 to $50,000 per day fine for violations of the bill which are deposited to the Refrigerant Stewardship Recovery Penalty Account.

9) Makes findings and declarations.

Background

1) *Solid waste in California.* For more than three decades, CalRecycle has been tasked with reducing the amount of waste that is landfilled and promoting recycling in California through the IWMA. The IWMA establishes a goal of source reducing, recycling, or composting at least 75% of solid waste generated in the State by 2020. However, according to CalRecycle's 2021 State of Disposal and Recycling, the State's 2021 recycling rate was just 40%. The single largest contributor to this recycling rate was recyclables that were exported out of the state. The statewide recycling rate has declined over the last decade, following a peak of 50% in 2014. The recycling rate has been impacted and may continue to be impacted by global policies like China's National SWORD and the Basel Convention, which restrict the amount of foreign waste these countries will accept.

   The Legislature has enacted various laws to move the needle on the state's waste diversion goal, including policies that target organic material and plastic, two major categories of waste. The Legislature charted a course toward comprehensive organics recycling in 2016 with the passage of SB 1383 (Lara, Chapter 395, Statutes of 2016), which requires local entities to build organics recycling infrastructure to achieve a 75% composting rate by 2025. Major plastics legislation followed in 2022 with the passage of SB 54 (Allen, 2022) which uses an EPR program to significantly reduce plastics in packaging and single-use service-ware.

2) *The basics of EPR programs*. One strategy to reduce waste generation is to put responsibility on producers to oversee the safe end-of-life of their products through an EPR program. EPR programs rely on industry, formalized in a PRO, to develop and implement approaches to create a circular economy that make business sense, with oversight and enforcement provided by the government. EPR programs require producers to factor in costs associated with disposal. In doing so, EPR programs incentivize industry to design products with waste minimization in mind. Currently, there are six statewide EPR programs: paint, carpet, mattresses, pharmaceutical and sharps waste, batteries, and, following the passage of SB 54 (Allen, 2022), packaging and single-use plastic service-ware items.

3) *Appliance recycling: market and regulations*. Appliances are profitable to recycle, consisting of (on average) 75% steel, an easy to recycle material with a high scrap value.[1] The American Iron and Steel Institute reports that appliances have a 78% recycling rate in the US.[2] However, appliances such as freezers and refrigerators may also contain hazardous materials.

   Refrigerants are designated as a "Material that Requires Special Handling" (MRSH; PRC § 42167) and therefore cannot be disposed of like typical solid waste. An appliance containing only refrigerants must be handled by a technician certified under Section 608 of the Clean Air Act under the U.S. EPA. An appliance containing refrigerants and additional MRSHs must be certified both by the EPA and as a Certified Appliance Recycler (CAR) by DTSC.

   Landfills and metal recyclers cannot dispose of, crush, or process appliances which contain refrigerants. First, they must verify that the appliance has been processed by an EPA certified technical or have on-site EPA certified technicians who can remove the refrigerant. Since metal scrap is profitable, appliances which have had the refrigerant removed rarely end up in the landfill. Most enter the metal recycling market to be processed, shredded, and melted into a new raw material.

4) *Finding an appliance recycler.* Local jurisdictions vary in how they collect appliances. For example, Sacramento will collect appliances from a household twice a year for no charge along with e-waste. Other jurisdictions may require

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[1] American Iron and Steel Institute, *Appliances and Steel Make Life Easier: Steel Appliance Facts* https://www.steel.org/steel-markets/appliances

[2] American Iron and Steel Institute (2021) *Determination of Steel Recycling Rates in the United States, Technical Report.*

residents to drop off appliances at landfills or CARs. Other jurisdictions may have no guidelines for appliance disposal, requiring residents to contact a for-profit waste removal service for pick-up or drop-off of the appliance. Additionally, jurisdictions which restrict free pick-ups to a certain number of times per address could preclude those in multifamily housing from affordable appliance collection.

As of 2021, there were 129 Certified Appliance Recyclers.[3] A map of CARs on the DTSC website shows several counties without access to an appliance recycler.[4] However, consumers have more options beyond CARs. Metal recyclers also serve as drop-off locations but are not mapped by DTSC. When these drop-off locations aren't CARs, the appliances are transported by the metal recycler to a CAR. Since these locations are not certified or managed by an agency, there's no accessible tool to determine where they are located or how many there are. Therefore, though appliances are highly recyclable (both the scrap metal and the refrigerant), many may end up in landfills or illegally dumped in absence of a certified recycler.

5) *Illegal Dumping*. Illegal dumping is a crime punishable by a fine up to $10,000 and up to 6 months in jail (Penal Code (PEN) § 374, HSC §117555). The metal recycling industry claims that since scrap metal is so valuable, even orphaned appliances are collected by recyclers. Recyclers are incentivized to collect orphaned appliances because they are not liable for the venting of MRSH vented before retrieval as long as a DTSC 1459: Certified Appliance Recycler Orphan Waste Form is completed and submitted to DTSC.[5] The 1459 Form reports missing MRSH to DTSC. After retrieval, a CAR is responsible for properly processing any remaining MRSH.

   While it is a success that illegally dumped appliances are ultimately processed by certified recyclers, these orphaned appliances are still at higher risk of venting refrigerants into the atmosphere compared to an appliance disposed of legally. Though it is important that those illegally dumping hazardous materials are held accountable, it may be a symptom of CAR scarcity and variability across local jurisdictions. However, there are no publicly available statistics on orphan appliances in California, despite the Form 1459 data collection. It is unclear the extent to which and where the illegal dumping of appliances is a significant problem.

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[3] DTSC (2021) *Approved Certified Appliance Recycler List by City*.
[4] DTSC, *Certified Appliance Recycler (CAR) Program,* https://dtsc.ca.gov/certified-appliance-recycler-car-program
[5] DTSC, *CAR Program – Managing Major Appliances*, https://dtsc.ca.gov/certified-appliance-recycler-car-program/car-program-managing-major-appliances/

6) *Refrigerants and Climate Change*. Hydrofluorocarbon (HFCs) refrigerants were developed when chlorofluorocarbons (CFSs) were banned (in the US in 1978 and globally by the Montreal Protocol in 1987) for damaging the vital ozone layer.[6] Unlike CFCs, HFCs are not ozone depleting substances and therefore can be used in consumer appliances without endangering the ozone layer. However, HFCs are potent greenhouse gases (GHGs) with global warming potentials ranging from 124 to 14,800 times that of carbon dioxide.[7] HFCs on average stay in the atmosphere for 15 years and represent 2% of total GHG emissions.[8]

   Due to the increasing use of HFCs,[9] the international community adopted the Kigali amendment to the Montreal Protocol in 2016, which set a goal to reduce HFC emissions by more than 80% over 30 years.[10] California also has a state-wide goal of a 40% reduction In HFC emissions below 2013 levels by 2030 (SB 1383 (Lara)). Additionally, as part of the California Global Warming Solutions Act of 2006, the California Air Resources Board (CARB) established the Refrigerant Management Program which requires registration of appliances with refrigerants, refrigerant leak detection and monitoring, leak repair, system retrofitting, and refrigerant distributor, wholesaler, and reclaimer prohibitions, recordkeeping, and reporting.[11]

   Some manufactures claim to have made the switch to climate or environmentally friendly refrigerants, such as R-32, R-513A, or R-600.[12] However, CARB warns that "in some cases high-GWP refrigerants have been advertised as 'environmentally friendly' or 'low-GWP' when they are in fact high-GWP and regulated under the [Refrigerant Management Program]. Be sure to verify any advertised claims." Indeed, only one of the three listed refrigerants has a low global warming potential: R-600 (butane). R-32, R-513A, or R-600 have global warming potentials of 675, 630, and 4, respectively.[13,7] The Association of Home Appliance Manufactures stated that

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[6] US EPA (1993) *Regulatory History of CFCs and Other Stratospheric Ozone-Depleting Chemicals (to 1993),* https://www.epa.gov/archive/epa/aboutepa/regulatory-history-cfcs-and-other-stratospheric-ozone-depleting-chemicals-1993.html

[7] US EPA (2026) *Technology Transitions GWP Reference Table***,** https://www.epa.gov/climate-hfcs-reduction/technology-transitions-gwp-reference-table

[8] Climate and Clean Air Coalition, *Hydrofluorocarbons (HFCS)*, https://www.ccacoalition.org/short-lived-climate-pollutants/hydrofluorocarbons-hfcs

[9] NOAA Chemical Sciences Laboratory (2022) *Projections of HFC emissions and the resulting global warming*, https://csl.noaa.gov/news/2022/350_0511.html

[10] US EPA (2026) *Recent International Developments under the Montreal Protocol,* https://www.epa.gov/ozone-layer-protection/recent-international-developments-under-montreal-protocol

[11] CARB, Refrigerant Management Program*, https://ww2.arb.ca.gov/es/our-work/programs/refrigerant-management-program/about*

[12] The Refrigerant School, *What are the Most Environmentally Friendly Refrigerants?* https://www.rsi.edu/blog/skilled-trades/what-are-the-most-environmentally-friendly-refrigerants/

[13] CARB, *High-GWP Refrigerants,* https://ww2.arb.ca.gov/resources/documents/high-gwp-refrigerants

some manufacturers have made the switch to iso-butane (R-600a) which has a global warming potential of 1.[7] However, there is no publicly available data on the industry switch to truly low global warming potential refrigerants.

Despite international and statewide efforts, HFCs still pose a threat to the atmosphere. Researchers with the National Oceanic and Atmospheric Administration hypothesize that some HFCs can become CFCs after they're emitted, creating ozone-depleting GHGs with lifetimes of 52 to 640 years.[14] If the international community doesn't decrease HFC emissions in line with the Kigali Amendment, HFCs could be responsible for 0.28 to 0.44°C of warming by 2100.[9]

Comments

1) *Purpose of Bill.* According to the author, "Many of the household appliances we use every day – such as refrigerators, freezers, and air conditioners – contain refrigerants, which are gases used to absorb and release heat to keep our homes cool and our food fresh. However, when not properly handled at the end of their useful life, these refrigerants can escape into the atmosphere with serious climate consequences. Refrigerants are the fastest growing source of greenhouse gas emissions in California, with some gases having global warming potential hundreds to thousands of times greater than carbon dioxide. The impact of proper recovery is clear – for every 1,000 refrigerators responsibly recycled, emissions are reduced by the equivalent of removing 1,500 cars from the road for a year.

   "SB 1010 will help prevent the release of potent greenhouse gases and support responsible appliance management by establishing a manufacturer stewardship program. Under SB 1010, manufacturers will be responsible for developing and funding a statewide plan for the collection, transportation, and management of discarded appliances. Without a proper end-of-life appliance management system in place, these dangerous greenhouse gas emissions will continue to grow as more appliances reach the end of their useful life – undermining the climate progress we have worked so hard to achieve in California."

2) *If it ain't broke…* EPR programs shift the burden of responsible end-of-life from the consumer and recycling facilities to the manufacturer. Therefore, EPR programs can be a great solution for products which are burdensome for the

[14] NOAA (2023*) The Montreal Protocol banned this family of ozone-depleting chemicals. Why are some still increasing?* https://research.noaa.gov/the-montreal-protocol-banned-this-family-of-ozone-depleting-chemicals-why-are-some-still-increasing/

consumer to dispose of or expensive for a recycler to process. For example, the mattress EPR program requires retailers of mattresses to collect your old mattress when they deliver the new one. The consumer no longer has to call the city's waste management for bulky item pick up or borrow their friend's truck to take it to a landfill, paying for gas and landfill fees. The consumer is also less likely to illegally dump their mattress on the side of the road. EPR programs can also be a solution when people are ready and willing to recycle, but there isn't a thriving recycling industry to take the product. SB 54 aims to correct this with plastics, shifting the cost of recycling expensive-to-recycle plastics from recycling facilities to the manufactures.

Which problem is SB 1010 looking to solve? Metal scrap is profitable enough that there is already a market collecting, processing, shredding, and melting down appliances. The next possibility is a lack of consistent and convenient opportunities for the consumer to properly dispose of an appliance. Orphaned appliances have the potential to release potent GHGs into the atmosphere. However, the extent of this problem is not known. Ultimately, appliances already have an exceptionally high recycling rate (78%), close to that of the highly successful mattress EPR program.[2,15] *The author may wish to identify the appropriate policy gap and tailor SB 1010 to address that gap.*

3) *Rates and Dates*. EPR programs often have target recycling rates to achieve on specified timelines. In this case, the recycling rate refers to the percentage of covered products which go to responsible end markets out of all the covered products sold. Currently, SB 1010 gives discretion to CalRecycle to set performance standards and dates. There is precedent for this in the mattress EPR program. CalRecycle reached an 81% recycling rate in 2019 and aims to maintain or exceed an 83% recycling rate from 2025 to 2029.[16] Giving CalRecycle discretion to set the rates and dates allows for subject matter experts with direct access to recycling data to set realistic goals; consequently, the mattress EPR program has been a success with a high recycling rate. The flip side is that CalRecycle did not pick a more ambitious goal after 2019.

   In contrast, SB 54 (Allen) prescribed performance standards, requiring recycling rates no less than 30%, 40%, 65% by January 1, 2028, 2030, 2032, respectively. These rates were chosen in collaboration with lawmakers and industry leaders to create an ambitious and realistic roadmap to reduce single-use plastic. However, this precludes CalRecycle from adjusting the standards if they prove infeasible or insufficient. In summary, prescribed rates and dates can be more ambitious, acting as a north star for an EPR program, in contrast to those chosen by an agency which can be less ambitious but more feasible.

[15] CalRecycle, *State Mattress Recycling Goals*, https://calrecycle.ca.gov/mattresses/baseline/

Ultimately, the state and the globe have committed to ambitious HFC emissions reductions. SB 1010 fits within these commitments by increasing the state's ability to ensure a safe end-of-life for "hazardous and climate damaging" refrigerants. To be in line with state and global HFC reduction goals, *the author/committee may consider including performance standards and dates picked in collaboration with relevant industry partners.*

Related/Prior Legislation

AB 80 (Aguiar-Curry, 2025) creates an EPR program for carpets. This bill is held under submission.

SB 254 (Hancock, Chapter 388, Statutes of 2013) establishes an EPR program for mattresses.

SB 303 (Allen, 2023) amends SB 54 (Allen, 2022) to give additional authority to CalRecycle, including to adopt regulations on identifying responsible end markets and worker health and safety. This bill was vetoed.

DOUBLE REFERRAL:

This measure will be considered in the Senate Judiciary Committee on April 21, 2026.

SOURCE: California Product Stewardship Council

SUPPORT:

7th Generation Advisors
A Voice for Choice Advocacy
California Product Stewardship Council
Californians Against Waste
Center for Environmental Health
Circular Polymers
Cleanearth4kids.org
The Climate Center
The Watershed Project
Western Placer Waste Management Authority (WPWMA)

OPPOSITION:

Association of Home Appliance Manufacturers
Recycled Materials Association - West Coast Chapter

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