

Climate Action Plan

Our 2024 Climate Action Plan shares an update on the progress we made this year and explains our future plans to advance our work on climate-related issues.



Introduction

Our approach to addressing our climate impacts is rooted in our sustainability principles, with a strong emphasis that we are learning as we go and seeking continuous improvement. This year's Climate Action Plan update is a reflection of that learning and progress we have made to address our impact on global climate change. This section outlines our efforts to reduce emissions across our business, build supply chain resilience, and reduce our environmental impact.

The viability of our Climate Action Plan depends upon many external factors that may be directly or indirectly beyond our control and include: our suppliers' ability to meet our expectations, socio-economic and public health risks, the direct and indirect impacts of global climate change on our operations and global value chain, changes in the international, national, and subnational policy and regulatory landscape, permitting requirements, the availability of refrigerant equipment and low-GWP refrigerant alternatives, the availability of qualified refrigerant and HVAC service providers, and the requisite supply of clean energy. Supply chain volatility, energy and commodity pricing, regulatory signals, shifting member preferences and stakeholder attitudes also are material factors that can impact our Climate Action Plan timeline. The data reported is compiled from sources that we believe are reasonable to rely on at the time of publication and may change as new information becomes available. Future reports may change accordingly.

Our Climate Action Plan:

Aligns with regulatory requirements and global standards: We incorporate regulatory requirements, certain global standards and industry guidance across measurement, disclosure and reporting and will continue to monitor evolving standards and guidance. These frameworks and standards continue to inform our approach to climate action.¹

Includes an accountability and governance model for climate progress: Costco's approach to climate reporting is evolving as the world and regulatory environment are changing. In 2022, we introduced our Task Force on Climate-Related Financial Disclosures (TCFD) report, and for fiscal year (FY) 2024 we have expanded our disclosure to better align with the European Sustainability Reporting Standards (ESRS) related to the European Corporate Sustainability Reporting Directive (CSRD). As a part of this transition, we are no longer annually updating our TCFD report, and its content is now integrated into the Climate Risk Statement which will become a part of our future CSRD reporting. Our new Climate Risk Statement can be found on the [Governance & Reporting section](#) of our Sustainability Commitment.



¹ While we have not adopted Science Based Targets, we actively consider SBTi's Corporate Net Zero Standard as a framework for ambitious climate strategy and will continue to utilize SBTi's guidance. Solutions must be operationally viable and fulfill our obligations to our shareholders, employees, members, suppliers and the communities we serve. Additional guidelines and frameworks we consider include the GHG Protocol Accounting & Reporting Standard, TCFD, TNFD, IPCC, COP, SDGs and CDP.

Emissions Executive Summary

Provides transparent disclosure: Transparency and disclosure of our progress toward our climate goals are important. We believe in measuring our progress and sharing what we have learned with our community and stakeholders. We currently disclose climate and forest-related data to industry-wide forums, such as CDP, and we offer detailed information about our projects and efforts via our [Sustainability Commitment](#) website.

Supports a holistic approach to climate: We have aligned our sustainability efforts and initiatives related to climate using a holistic and integrated approach. Climate has a number of interdependent issues, in addition to emissions, that we consider. These include but are not limited to: water, forests, biodiversity and a just transition for people and communities. We continue to broaden our work on climate in a holistic manner and in fiscal year (FY) 2025, we will continue to implement our global water strategy, analyze biodiversity risk in our supply chains using the LEAP assessment framework, and work on understanding how we continue to drive a just transition forward.

Our programs are helping us make progress. Over the past few years, we have made strides in our climate journey. Our Scope 1 and 2 emissions work is more mature and has been bolstered with the inception of our STAR Program in 2021 (more information can be found on the “Environmental Compliance” page in the [Operations section](#) of our Sustainability Commitment). This work has helped us prepare for Scope 3 improvement in a way that resonates with our culture. To meet our decarbonization goals for Scopes 1, 2 and 3, we need our employees to contribute in innovative ways, from reinforcing programs that have been in place to changing practices going forward. This requires broadening awareness and learning and implementing new policies and procedures.

We have been able to use learnings generated from work on climate within our own direct control to inform our Scope 3 emissions strategy and approach. As a result, there are common themes to our approach across all scopes, such as broadening awareness, providing education, shifting toward clean energy, and focusing on resource efficiency and efficient transportation. In addition, our approach to reducing emissions is to set targets accompanied with pragmatic action plans that we believe will help us reach these targets.

Across the entire business, notable accomplishments of the past year include:

- Made progress overall on our Global Energy Strategy, with an emphasis on improving the Energy and Refrigeration programs globally through a revised STAR program.
- To make progress in Scope 2, continued to increase procurement of electricity from clean sources², which as of the end of calendar year 2023 represented 21% of our global purchased electricity.³
- Implemented a Periodic Emissions Checklist in all of our US locations, which guides management teams to review all of their refrigeration equipment to ensure they are working as they should.
- Revised our fugitive emissions strategy related to refrigeration based on updated technology and industry best practices.
- Introduced ENERGY STAR benchmarking to our STAR program, which helps our warehouse locations compare against similar buildings and learn about potential energy-saving opportunities.
- Launched our STEP program and strategy for reducing our supply chain emissions (see below).
- Reported all scopes for FY20⁴, FY21, FY22, and FY23 (all-third party verified) and our forestry data to CDP in October 2024 and participated in CDP Supply Chain, which requests our top 700 suppliers to disclose their Scope 1, 2, and 3 emissions to CDP.
- Invested in our technology and data infrastructure to build a platform for reporting and measurement across all scopes.

While our target to decrease Scope 1 and 2 emissions is based upon an absolute reduction and our target to decrease Scope 3 is based upon an intensity reduction, we disclose both our absolute and intensity emissions for all three scopes. We are a growth company and despite our growth, we are showing progress in our reduction efforts. Our emissions footprint across all three scopes for FY23 totaled 186M MT CO₂e, up only 1% from FY22 on an absolute basis and when looking at intensity basis, all three scopes decreased.

² Clean energy as defined by the U.S. Department of Energy (DOE) includes solar, wind, hydroelectric, geothermal, nuclear and bioenergy.

³ Purchased electricity is all sources of electricity including electricity delivered through the grid and self-generation.

⁴ For Scope 1 & 2 emissions, we reported and verified CY20 data until we aligned our verification to fiscal year in FY21.

Across our business, our emissions progress from the last year includes:

- Scope 1 emissions increased by 1.3%⁵ from FY22 to FY23, despite our sales and square footage growth outpacing that rate.
- Scope 2 market-based emissions, despite our growth, decreased 3% over the past year, driven by purchasing more electricity from clean sources.
- Scope 3 emissions increased 1%, despite a 7% merchandising sales growth.

Please note that we did update our Scope 3 Category 1 and Category 4 calculation methodologies in FY23 and consequently, re-baselined and re-footprinted our Scope 3 emissions for years FY20, FY21 and FY22 to incorporate this methodology change.⁶

Scope 1, 2, & 3 Emissions¹(MT CO2e) | Absolute Metrics

Metric	Base year			
	FY20	FY21	FY22	FY23
Scope 1 Emissions	1,205,620	1,218,381	1,405,640	1,424,357
Scope 2 Emissions				
Market Based	1,408,963	1,418,244	1,375,183	1,336,087
Location Based	1,457,413	1,428,751	1,425,977	1,455,121
Scope 3 Emissions	150,135,755	164,755,688	181,114,446	183,190,194
Fuel	55,425,128	61,635,511	75,056,928	80,457,069
Non-Fuel	94,710,627	103,120,177	106,057,518	102,733,125
Total Emissions (Mkt Based)	152,750,338	167,392,313	183,895,269	185,950,638

Scope 1, 2, & 3 Emissions¹(MT CO2e) | Intensity Metrics²

Metric	Base year			
	FY20	FY21	FY22	FY23
S1 & S2 Intensity (MT CO2e / '000 Sq ft) Market	18.1	17.5	18.1	17.3
S1 & S2 Intensity (MT CO2e / \$M Net Sales) Market, inflation-adjusted	16.0	14.3	13.9	13.5
S3 Intensity (MT CO2e / \$M Net Sales) Company-wide, inflation-adjusted	920	892	905	895
S3 Intensity (MT CO2e / \$M Net Sales) Ex-fuel, inflation-adjusted	636	615	614	576

¹ We updated our Scope 3 Category 4 methodology to cover all estimated emissions and our Scope 3 Category 1 to include Costco Travel

² We include an inflation adjustment in some of our metrics. The inflation adjustment is based on U.S. CPI-U Index: City Average All Items Less Energy published by the Bureau of Labor Statistics

⁵ While we saw decreases driven by decreased bunker fuel use, we saw increases in diesel transport for our fleet and overall company use of natural gas.

⁶ We updated our Scope 3 Category 4 methodology to cover all estimated emissions and our Scope 3 Category 1 to include Costco Travel.

Scope 1 & 2 Emissions

While we have made progress, we also recognize the challenges that we face as we continue towards achieving our goals. Competition for clean energy will become steeper based on supply and demand. This increase in demand will be driven by factors including the need for more data centers to support generative AI, regulations that require electrification of mobile fleets, consumer behavior shifts towards electric vehicles, and the need for more energy to cool and heat our facilities in light of more extreme weather (both hot and cold). Furthermore, the regulatory landscape may continue to shift regarding the level of support for climate-related investments. Areas in which we do not have direct control (e.g., our Scope 3 value chain) are yet subject to the decisions our suppliers make with respect to their own strategies and business objectives. We will continue to find creative ways to address these challenges as we execute our climate strategy.

We recognize the opportunity to decarbonize our global operations, from our warehouses to our depots and business centers. We also understand that climate and energy-focused efforts in our operations can create near and long-term business value through lower operating costs, reliable electricity from clean sources to supply our warehouses, depots and business centers, and more resilient infrastructure.

Our Scope 1 and 2 Reduction Target

We have committed to an ambitious Scope 1 and Scope 2 emission reduction target: 39% absolute reduction by 2030 compared to our 2020 base year. We have committed to operate with 100% clean energy sources by 2035. As we work towards these goals, we have been learning more about not only the opportunities in procuring electricity from clean sources, but also about the opportunities to consider alternatives to natural gas. To achieve these ambitious targets, we are evaluating, piloting and implementing a range of initiatives in our warehouses, expanding our procurement of electricity from clean sources and enhancing our framework to measure and monitor progress toward our goals.

Our Scope 1 and 2 Action Plan

Our Global Energy Strategy is the foundation of our Scope 1 and Scope 2 Action Plan. Led by select members of our executive leadership team, this cross-functional strategy focuses on five areas:

Energy Supply: Our priority is to purchase electricity from clean sources and integrate on-site energy generation systems when operationally and financially feasible. Since 2020, we have been using a portfolio-wide approach to procure, generate and use electricity from clean sources in our operations. We currently acquire source-specific power with the verified emissions-free certificates to reduce our Scope 2 emissions.

Energy Efficiency: Increasing the energy efficiency of our warehouses, depots and business centers is crucial to long-term decarbonization as well as creating energy cost savings and financial return on our investment. We are implementing programs to improve the efficiency of heating, ventilation, air conditioning (HVAC) and refrigeration systems, light fixtures and other aspects of our warehouse operations.

Refrigeration: Fugitive emissions is an area of continued focus to reduce the harmful impacts from hydrofluorocarbons and other gases from the refrigeration systems in our operations. We are committed to accelerating the phase-out of HFCs and increasing our investment in refrigeration retrofits to reduce refrigerant emission Global Warming Potential (GWP) by 30% by 2030 as compared to our 2020 baseline.

Transportation: We are exploring electrification for our transportation equipment where it makes financial and operational sense. This includes testing and deploying electric yard goats, exploring additional fleet electrification opportunities and using renewable diesel throughout our California depots and business delivery centers. For more information, see the “Transportation & Logistics” page in the [Operations](#) section.

Design & Site Selection: We understand the impact that the materials we use in the construction of our facilities and the locations we choose for our warehouses, depots and manufacturing facilities have on our carbon footprint and the natural environment. We continue to explore ways in which we can minimize our carbon footprint and environmental impact with our site selection, design and construction choices.

Where We Are Today

Numbers reported as of Calendar Year (CY) or Fiscal Year (FY) end.

	CY22	CY23	CY24
Purchased electricity from clean sources per calendar year	19%	21%	23% ¹
Sites enrolled for 100% electricity from clean sources per calendar year	33	108	44

	FY22	FY23	FY24
Diesel fuel replaced with renewable diesel (millions of gallons) per fiscal year	0	2.4	7
Retrofits of refrigeration systems with lower GWP refrigerants installed per fiscal year	15	16	24
CO2-based refrigeration systems installed per fiscal year	10	7	13
Energy-efficient LED lighting retrofits installed per fiscal year	NA ²	142	112

¹ Projected value for calendar year 2024.

² Prior to FY23, we worked on energy-efficient lighting retrofits but did not track the numbers reliably.

Scope 3 Emissions

Costco is committed to doing our part to reduce emissions and improve the resilience of our supply chain. Scope 3 emissions, unlike Scope 1 and 2, are outside of our direct control. We will need to rely upon and partner with our suppliers to make substantial transformation. We have developed a comprehensive approach to our Scope 3 emissions in a program we call “STEP” focusing on four key pillars: Supplier Targets, Transition Agriculture, Energy Solutions and Packaging Solutions. Accompanying this program, we have also been working on a supplier engagement plan, education programs and IT infrastructure to support reporting and measurement.

Our Scope 3 Reduction Target

We estimate that our STEP plan will lead to a 20% reduction in our Scope 3 emissions intensity (inflation-adjusted) by 2030 from our baseline year of FY20, excluding fuel. We recognize that this Scope 3 reduction target is not fully aligned to a 1.5-degree pathway. That pathway is not currently achievable for us if we are to continue to provide for all of our stakeholders. However, we believe this is an ambitious yet achievable target based on existing technologies, and we continue to explore opportunities for further improvement.

While we are excluding fuel from the target, we have developed a separate climate transition plan for our fuel business (see below).

Our Scope 3 Action Plan

We believe that our STEP program helps orient our work on the areas of most meaningful impact. We hope our supplier efforts in reducing their Scope 1 and 2 emissions will lower our Scope 3 emissions and that we can learn from these successes to continue to drive change:

Supplier Targets: We recognize that our Scope 3 emissions are comprised of our suppliers' Scope 1, 2, and 3 emissions. We also recognize that many of our suppliers are working towards their own climate goals which will benefit the entire supply chain. We will be focusing on how we track and measure the progress of our suppliers and encourage them to set goals and targets. We'll also be providing educational support for those who may be newer to working on climate initiatives.



Transition Agriculture: A significant portion of our business is reliant on agriculture-based commodities, which are high carbon emitters. We are committed to supporting nature-based solutions, such as regenerative agriculture practices. These practices also have the benefits of protecting our soils, water and biodiversity as well as creating greater resiliency in times of more extreme weather events. We are also focusing our efforts on sourcing deforestation-free commodities, with a particular focus in cocoa, coffee, palm, soy, beef, and timber, as we recognize the importance of protecting our forests in addressing climate change. You can find more detailed information on our regenerative agriculture, deforestation and biodiversity programs in the “Nature & Biodiversity” page found in the [Merchandising section](#).

Energy Solutions: We sell items that consume energy. We believe that working toward greater energy efficiency with our suppliers and leveraging existing energy efficiency certifications (e.g., ENERGY STAR™) can help us to reduce our Scope 3 Category 11 emissions footprint. Furthermore, we are looking for ways to offer support to our suppliers regarding transitioning to clean energy within their supply chains.

Packaging Solutions: We have made progress on sustainable packaging over the years and will continue to make this a focus. We will continue to work with our suppliers to find ways to reduce unnecessary packaging, implement reuse models in operations, adopt lightweight packaging optimized for shipping efficiencies, and increase recycled content opportunities. You can find more detailed information on the “Packaging” page found in the [Merchandising section](#).

Where We Are Today

Since setting our intensity target in December 2023, we have worked on a number of initiatives and measured progress where available. We recognize that our work in Scope 3 is a long game but are excited to share some of the highlights from this last year.

- We saw an increase in supplier engagement with our CDP Supply Chain request. In 2023, we saw about 300 suppliers submit responses. In 2024, we saw 445 of our suppliers submit responses.

- To address deforestation in our key commodity supply chains, we have continued to emphasize the importance of purchasing certified product⁷ as many certifications support deforestation-free sourcing, which will help lower our Scope 3 emissions coming from land-use change.
- We invested in a number of regenerative agriculture pilots with Truterra, ADM and Cargill to support farmers' transition to regenerative agriculture practices.
- Our buying teams continue to look for opportunities to purchase energy efficient items. We increased our percentage of energy efficient⁸ items in our U.S. portfolio in relevant categories from 40% to 49.7% in the last year.
- We reached an all time high of an 82.1% waste diversion rate which helped us limit our Scope 3, Category 5 emissions in light of our growth.

Scope 3 | Breakdown by Business Segment¹

Metric	Base year FY20	FY21	FY22	FY23
Upstream (MT CO2e) CAT 1 & 4	91,688,264	99,369,477	104,676,120	98,766,720
Value Chain Operations (MT CO2e) CAT 2, 3, 5, 6, & 7	1,681,153	1,799,782	1,934,563	2,311,951
Downstream (MT CO2e) CAT 9 & 11	56,766,338	63,586,429	74,503,763	82,111,523
Total S3 Emissions (MT CO2e)	150,135,755	164,755,688	181,114,446	183,190,194

¹ Categories 8 & 13 were considered out of scope due to materiality; Categories 10, 14, & 15 were excluded due to lack of applicability to Costco's business; Category 12 was excluded due to lack of data

Fuel Transition Plan

Emissions from our fuels business comprise ~40% of Costco's total emissions, largely Scope 3. We are taking actions to directly address these emissions, as outlined in this transition plan. At the same time, we will continue ensuring that our members have access to affordable and high-quality transportation fuels. Similarly, we're providing additional members with the necessary infrastructure to shift toward new lower-carbon transportation options such as EVs.

⁷ Certified product includes but is not limited to products that are certified by entities like: Fairtrade International, Fair Trade USA, Rainforest Alliance, FSC, PEFC, SFI, MSC, ASC, etc.

⁸ We qualify items that are ENERGY STAR and / or EPEAT certified as "energy efficient". We also include items that have product carbon footprints that are comparable to industry averages for ENERGY STAR and / or EPEAT certified items.

Overall Action Plan

We plan to take action across the entire span of the fuels business, including emissions upstream of the fuel station, at the fuel station and downstream of the station (e.g., combustion).

Upstream of the fuel station, our focus will be on procuring the lowest carbon intensity fuels available. We estimate that ~20% of fuel-related Scope 3 emissions stem from Costco's fuel supply, and can be reduced by purchasing from refineries that prioritize clean procurement and production. We are engaging fuel suppliers to better understand their carbon footprint, climate goals, disclosure protocols and carbon reduction initiatives. We also expect this engagement to encourage refineries to use cleaner production methods.

At the fuel station, we work on fuel station management practices and procedures to minimize our environmental impact while ensuring members have continued access to affordable transportation fuels. Our efforts to date, highlighted in the next section, reflect our commitment to reducing negative environmental impact while ensuring members have continued access to affordable transportation fuels. To build on this progress, we are exploring the use of microgrids to power fuel station operations where feasible, and maintaining a focus on purchasing and maintaining state-of-the-art fueling equipment to minimize spills and vapor loss.

Emissions are also driven by combustion of fuel in members' vehicles. To combat these emissions, we will continue to use and refine proprietary additives in all gasoline fuel grades, which could provide an emissions reduction vs. LAC fuels.⁹ We are also focusing on enabling members to shift toward lower carbon intensity transportation methods when they're ready. We are closely monitoring the market as new technologies evolve (e.g., battery electric vehicles, hydrogen fuel cell vehicles and plug-in hybrids) to provide our members with the infrastructure necessary to utilize their preferred transportation methods.

⁹ LAC = Lowest Allowable Concentration; results shown in scenarios where Kirkland Signature™ Gasoline was tested against the minimum U.S. government-mandated detergency gasoline. Outcomes vary based on driving behaviors, engine type and vehicle maintenance intervals.

To support our members who have already purchased EVs and to encourage those considering a purchase, we are expanding our EV charging offering, with plans to open fast chargers at 20-plus warehouses. Our first fast EV charging station opened in Denver, Colorado, in 2023, and is serving as a pilot site to explore how to best provide EV charging services.

Where we are today

Current efforts to minimize emissions and environmental impact include initiatives across the fuel station value chain:

Upstream of the fuel station

Fuel procurement: We procure only from refineries that are compliant with EPA Tier-3 regulations, resulting in some Kirkland Signature fuels containing lower sulfur content.

Biofuels: We offer R99 (99% renewable diesel, 1% USLD #2) at all California fuel retail sites providing diesel, and plan to expand R99 offerings in Washington and Oregon. Renewable diesel has up to a ~65% lower carbon intensity than petroleum diesel.¹⁰

Fuel delivery: We deliver ~35% of fuels after warehouse close times, which reduces delivery truck delivery times and resulting emissions. Additionally, over 40,000 fuel deliveries in 2023 were performed by carriers with 90% renewable diesel penetration or greater.



¹⁰ [California Air Resources Board](#), LCFS Pathway Certified Carbon Intensities, [DOE](#)

At the fuel station

Station design: Stations are designed with environmental protection in mind. We use double walled and electronically monitored underground tanks and piping, continuous remotely monitored leak detection with automatic shut down, oil and water separators, trained and certified full-time attendants, and best-in-class components throughout the station.

Fuel storage: We upgraded our fuel storage tanks to manage tank pressure and minimize release of gasoline vapors through the installation of 393 vapor management systems. Combined, these efforts equate to an estimated reduction of 1.5k tons of volatile organic compounds, 4.6k tons of CO₂ and 522k gallons of gasoline.

Spill management: We use dripless and spitless fuel nozzles that yield a 90% reduction in spills, with a corresponding reduction in volatile organic compounds released. Additionally, employing full-time attendants allows quick response to rare spills.



Downstream of the fuel station

EV charging: We offer over 200 EV charging stations, including locations in Canada, China, France, Korea, Spain, Taiwan, United Kingdom, and the U.S. Charger speeds range from 7 to 350 kWh, allowing members to charge a vehicle in ~30 minutes at our fastest locations.

Residential charging: We stock residential charging products, ensuring members can purchase hardware to enable home charging, with speeds allowing vehicles to fully charge overnight.

EV sales: The Costco Auto Program offers members more than 50 different EV models through the program's approved dealer network. To date, approximately 103,000 EVs have been purchased via the Costco Auto Program.

EV rentals: Costco Travel offers a selection of electric and hybrid rental cars through our rental car suppliers at a variety of locations in the U.S., Canada and Europe. While these rentals reflect a small percentage of Costco Travel's rental car business, the category continues to grow. For a rental car on CostcoTravel.com, members can filter their search results to show "Eco-friendly" options to include these car categories if available at the location they're renting from.

Electric micro-mobility: We sell multiple eBike models and eScooter models in the warehouse and on Costco.com.

Through all these efforts, our goal is to support a just transition by providing members with low-cost best-in-class fuels, and opportunities to purchase, charge and rent electric vehicles. As the energy transition progresses, we look forward to continuing to meet members' energy transportation needs for a variety of vehicle types.

