A4S International Case Competition 2025

GreenSI - For a Greener Future

Pioneering a smart and innovative membership as a retail leader.

Jan 19th, 2025

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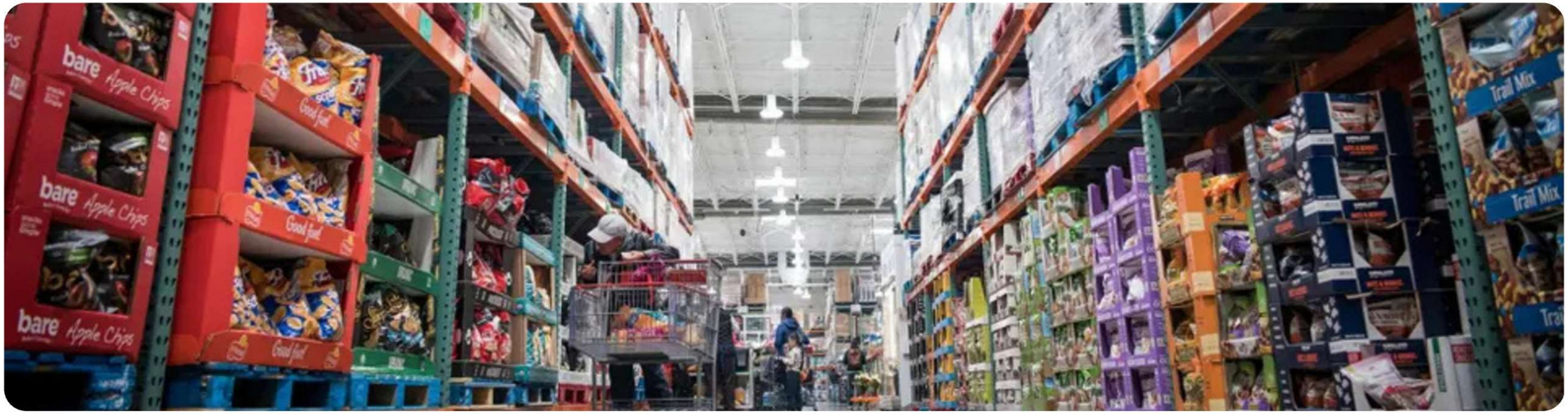
Bibliography



EXECUTIVE SUMMARY

Executive Summary

Situation

72%
of US shoppers considered a product's environmental impact

Really low
Ditchcarbon score of 33/100

Lack of plan
to incentivize suppliers and customers to adopt eco-products

Question

How can Costco's decarbonization efforts drive both environmental impact on its stakeholders and long-term profitability?

Solution

Costco Green Membership

GREEN+ Cashback
Offer **2% additional cashback** on eco-friendly products

GREEN+ Subsidize
Support the **access to certified products** for suppliers & reach eco-conscious customer base

GREEN+ Tracking
Provide **annual wraps** to attract & retain green members

Impact

$107M USD
additional revenue generated by 2025

7.8 million
metric tons eliminated on Scope 3

$30M USD
Sales Uplift for eco-friendly products

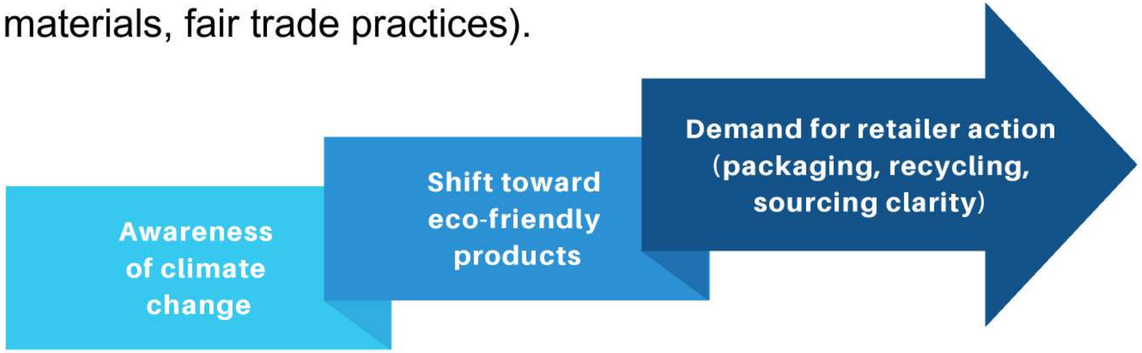
INDUSTRY ANALYSIS

Sustainability in Retail: Trends and ESG Focus

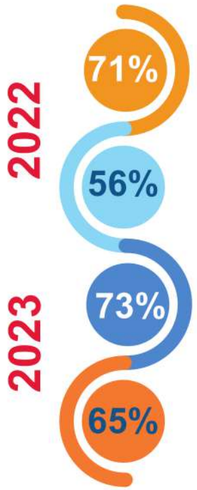
Source: PwC, CapitalOne Research, Diversitech Global

Overview

An emergence of sustainable retail including selling products and services in a way that minimizes negative environmental and social impacts while maximizing positive ones (e.g., sustainable materials, fair trade practices).



Corporate Sustainability Investments



- 71% of executives prioritized energy efficiency and sustainable materials
- 56% of executives focused on climate-friendly products
- 73% of CXOs increased sustainability investments.
- 65% of companies incorporated eco-friendly materials

Consumer Shifts Toward Sustainability

of consumers willing to pay more for eco-friendly products.

of consumer retail spending on sustainable products in 2023.

However, consumers do need actions from retailers to help them adopt a more sustainable lifestyle as

64% want brands to reduce packaging

50% want clear recycling instructions

46% need clarification on product sourcing

ESG Focus in Retail

- Reduce GHG emissions.
- Adopt renewable energy.
- Sustainable sourcing.

- Fair wages.
- Diversity.
- Community engagement.

- Transparency in reporting.
- Alignment with global standards (e.g., TCFD).

Sustainability in Retail: Competitive Landscape

	Walmart	TARGET	amazon	COSTCO WHOLESALE
Clean Energy Commitment	✓	✓	✓	✓
Net Zero Commitment	✓	✓	✓	✗
Ditchcarbon Score				
Ecosystems and Biodiversity			*N/A*	

COSTCO WHOLESALE

COMPANY OVERVIEW

Costco Overview (1/2)

A Comprehensive Look at Costco

As a company:

- Founded in 1983, headquartered in Issaquah, Washington.
- Operates over 850 warehouses globally, with a membership-based wholesale model.
- Known for offering bulk purchases, high-quality products, and low prices.

Industry position:

- Third-largest retailer in the world, generating billions in annual revenue (2024: $254B).

Financial Performance

Net Income

$7.4B

for FY 2024.
or $16.56 per diluted share, an increase of 17%

Costco Memberships

Costco is on good track for growth

136.8MM Card-holders

90.5% Renewal Rate

+6.5% Membership Income Growth

Costco E-commerce

Potential Assets for Acquisitions

+18.9% E-Comm Comparable Sales

+19.5% Adjusted E-Comm Comparable Sales

Top Sales Categories:

- Appliances
- Gold / Silver Bullion
- Home Furnishings
- Gift Cards

Costco has been growing significantly over time...

1976 — The Founding of Price Club (PRICE CLUB)

1983 — The Founding of Costco (Costco)

1993 — Merger with Price Club (COSTCO)

1997 — Rebranding to Costco Wholesale (COSTCO WHOLESALE)

2021 — Crossing $200 Billion in Annual Revenue

Costco presents at all corners of the world with 897 locations

Costco Overview (2/2)

Business Model

Costco is known for its membership-based model, bulk sales, and focus on efficiency and affordability, presenting unique challenges for decarbonization.

Costco's Single-step Distribution Strategy

Costco buys most of its merchandise directly from manufacturers and route it directly to its warehouses. This alllows a high inventory turnover and faster revenue generation

Kirkland Signature - value for money

Membership Model

92.9%

Costco's membership renewal rate in the U.S. and Canada. High customer retention and predictable revenue enable low product markups and drive customer loyalty.

Bulk Purchasing

Streamlined high-volume operations lower costs but contribute to significant transportation emissions.

Low-Margin Focus

14%

Average product markup. Emphasis on affordability and volume creates challenges in funding decarbonization efforts.

Current Approach to Sustainability

Climate Action Plan

Costco's roadmap to lowering carbon dioxide-equivalent (CO2e) emissions

SCOPE 1 + 2 EMISSIONS

REDUCTION TARGETS

39 absolute reduction by 2030 compared to 2020 base year

100 clean energy source by 2025

ACTION PLAN

Global Energy Strategy is the foundation of Scope 1 and 2 that focus on five areas

- **Energy Supply**: purchase electricity from clean sources
- **Energy Efficiency**: of warehouse, depots, and business centers
- **Refrigeration**: Fugitive emissions is a focus to reduce hydrofluorocarbons
- **Transportation**: explore electrification
- **Design & Site Selection**: minimize carbon footprint in the construction's materials

SCOPE 3 EMISSIONS

REDUCTION TARGETS

20 reduction intensity (inflation-adjusted) by 2030 compared to 2020 base year

ACTION PLAN

STEP Program

1. **Supplier Targets**: track suppliers' progress and provide educational support to set goals and targets
2. **Transition Agriculture**: support nature-based solutions and source deforestation-free commodities
3. **Energy Solutions**: offer support to suppliers regarding transitioning to clean energy within supply chains
4. **Packaging Solutions**: sustainable packaging, reuse model in operations, and lightweights packaging

Seven of the United Nations Sustainable Development Goals (SDGs)

Sustainable area of focus

Where Costco at Right Now

base on the Climate Action Plan FY24

	SCOPE 1 + 2 EMISSIONS	SCOPE 3 EMISSIONS
Action Plan for Reduction	Clear plan in place to reduce emissions	Limited specific strategies targeting Scope 3 (98% of total emissions)
Year-over-Year Reduction	Achieving consistent yearly reductions	Have risen consistently since FY2020 => **ineffective strategies**
Stakeholder Engagement	Some internal innovations but limited external collaborations	Lack of incentive to adopt sustainable practices
Innovation & Collaboration	Engaged through energy-saving initiatives still limited to internal operations	Limited collaborations => opportunities for innovative solutions

Area of Focus

Requires **innovative + sustainable solutions** to significantly reduce Scope 3 while indirectly improving Scope 1 and 2 performance

Sustainable Concerns

While Costco has made progress in sustainability, significant challenges still exist in tackling these areas that leaders should consider:

GHG Emissions

Despite setting reduction goals for each scope, Costco received a DitchCarbon Score of **33/100**, reflecting a higher carbon intensity in their operations

Source: DitchCarbon

Plastic Waste

Source: globaldata

Many of Costco's products (e.g., groceries, toys, apparel) still **use large amounts of plastic packaging**, indicating room for improvement in their five-year action plan for plastic reduction

Product

Costco was **ranked last** among Canada's eight major supermarket chains for sustainable seafood sourcing.

Source: Greenpeace

Governance & Reporting

Source: Havard Law School

Executive compensation **lacks integration with comprehensive ESG metrics**, unlike 75.8% of S&P 500 companies in 2023

To tackle these four concerns, Costco **needs a bold and unified solution** - turning sustainability challenges into opportunities for growth.

Analysis of Key Stakeholder Groups with Sustainability

	Costco	Suppliers	Customers
Interests	**Enhancing brand image**, meeting sustainability goals, driving profitability	Maintaining strong **business relationships** & adapting to **sustainability**	**Affordable** eco-friendly options, rewards or incentives
Challenges	Balancing sustainability with **operational costs**, ensuring program scalability	**High cost** of transitioning to sustainable practices, potential lack of resources or expertise.	**Price sensitivity, lack of awareness** or interest in sustainability programs
Benefits	Increased **new revenue streams, and reduced carbon footprint** with an eco-friendly reputation	**Stronger partnerships** with Costco, access to new markets, alignment with global sustainability trends.	**Financial savings through cashback**, contribution to environmental goals, access to eco-friendly products.

PROPOSED SOLUTION

Sustainable Program: Green+ Membership

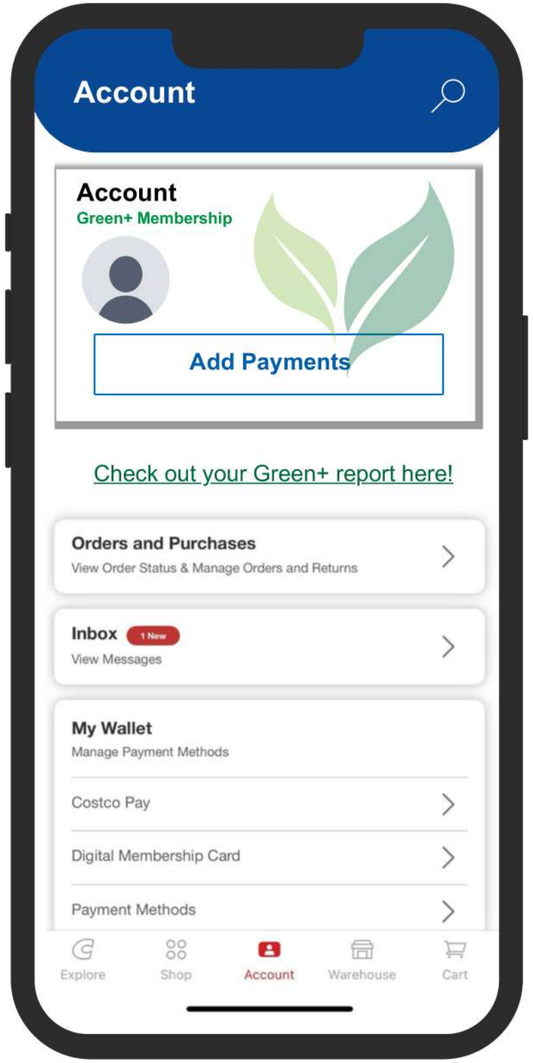
Overview

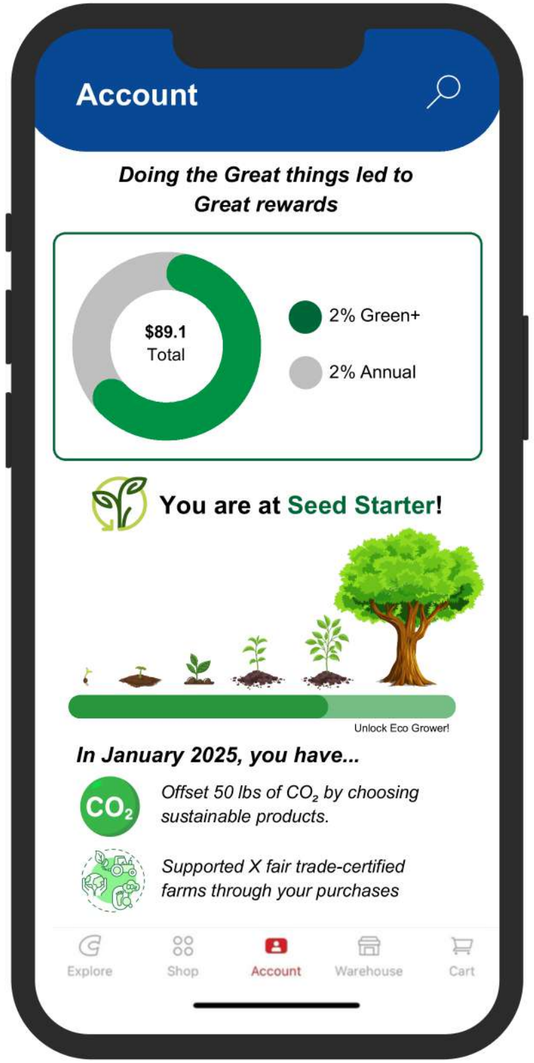
The Green+ Membership Program is Costco's initiative to reward sustainable consumer behavior while empowering suppliers and contributing to broader environmental, social, and governance (ESG) goals. Building on the benefits of the Executive Membership, the Green+ Membership offers exclusive perks designed to promote eco-conscious choices, enhance supplier sustainability, and foster a shared commitment to a greener future.

The Best Value for You and the Planet

Sustainable Program: Green+ Membership

Member Recognition & Impact Tracking





Rewards Tracking

This figure gives you the tracking of two cashback programs

- Traditional 2% cashback
- Additional 2% cashback for Green+

Eco Badge

Based on your sustainable activities, you will reach to 4 milestones:
Seed Starter, Eco Grower, Planet Protector and Earth Ally

Green Impact

Provides personalized monthly and annual sustainability impact reports for Green Members.

Sustainable Program: One Hundred Certified, One Solution

Empowering Suppliers with Certification Support

Costco Wholesale → Supplier Support → Certification Achievement → Ethical & Sustainable Supply Chain → Consumer Trust

Social

SA 8000 · B Corporation Certified · Fair Trade

Environmental

Global Recycled Standard · Gold Standard for the Global Goals · USDA Organic

Key Benefits

Strengthen reputation & consumer trust in sourcing transparency

Access to global markets with certified products and reach a broader eco-conscious customer base

Community Support

As a Green+ Member, you can donate part or all of your cashback rewards to certified sustainability initiatives or community programs supported by Costco.

Charitable Contributions Program

Examples of supported organizations for this charity program included: Communities in Schools, Special Olympics, Make-A-Wish Foundation, etc

Volunteer Reading Program

For over 20 years, Costco employees have dedicated 30 to 60 minutes per week for 10 to 15 weeks to tutor children who are below grade level..

Fair Trade and Ethical Sourcing

Supported organization to achieve certifications and purchasing fair-trade-certified products; Ensuring responsible eco-sourcing

Forest Conservation Commitment

Partnering with environmental organizations to fund conservation and reforestation efforts.

Disaster Relief Support

Costco is a longtime supporter of the American Red Cross Annual Disaster Giving Program..

Food Donations and Food Security

Costco addresses food insecurity by donating surplus food to local food banks and hunger relief organizations. This initiative helps reduce food waste while supporting communities in need.

Sustainable Membership Program: Green+ Membership

*people are willing to pay 8-9% more for sustainable products (Bain, 2024)

What is the difference between Green Membership and each type of membership?

	Costco Wholesale Gold Star Member	Costco Wholesale Business Member	Costco Wholesale Executive Member	Costco Wholesale Green+ Member
Price	$65	$65	$130	$139*
Valid at all locations	✓	✓	✓	✓
Purchase for Resale		✓		
Annual 2% Reward on qualified Costco purchases			✓	✓
Include one free Household Card	✓	✓	✓	✓
Additional benefits and greater savings			✓	✓
Additional 2% Reward on Green purchases				✓
Member Recognition & Impact Tracking				✓

Target Customer Persona for Green+ Membership

Value-Conscious Shoppers	Eco-concious & Affluent Household	Families with Children

Different Priority, Different Frequency

Similar Priority & Different Frequency

Customer Base: 60%

Key Traits: Seek saving and bulk purchases. Loyal due to affordability

Pain Points: Price-sensitive, less focus on sustainability => hard to change

Alignment:

Customer Base: ~ 66% (mostly Gen X & Baby Boomers)

Key Traits: Medium-High income, prioritize sustainable options

Pain Points: Expect measurable impact and high-quality offerings

Alignment:

Customer Base: 15%

Key Traits: Buy in bulk for savings, growing interest in healthy products

Pain Points: Balancing affordability with sustainable choices

Alignment:

To meet emission reduction target, Costco must increase more **certified eco-products and suppliers** for their eco-concious & affluent household to be an active GREEN member.

Target Customer Persona for Green+ Membership

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Which regions should Costco focus on at the pilot stage and in the long run?

	US/Canada	EU	Australia	Middle East	Japan/Korea	China	LATAM
Sustainability Awareness	🟡	🟢	🟢	🔴	🟢	🟡	🟡
Legacy & History	🟢	🟡	🟡	🔴	🔴	🔴	🟡
Regulatory Environment	🟡	🟢	🟡	🔴	🟡	🔴	🟡
Cost of implementation	🟢	🟡	🟡	🔴	🔴	🔴	🟡
Competition Landscape	🟢	🟢	🟡	🔴	🟡	🟡	🟡
Market Demand	🟢 Pilot >>>	🟡 Expand	🔴	🔴	🟡	🔴	🟡

As Costco has a **longstanding presence in North America**, **piloting** market entry in US/Canada as the starting point, then **expanding** to EU can **reduce significant risks**.

Expanding ESG Performance Metrics

Why is there room for improvement in Costco's governance initiatives?

	Walmart	TARGET	amazon	COSTCO WHOLESALE
ESG Metrics in Executive Pay	✓	✓	✓	✓
Include measurable targets for carbon emissions, renewable energy adoption, & sustainable supply chain practices	✓			
Advanced data analytics tools to track & report ESG performance real-time	✓		✓	
Broader Stakeholder Engagement with detailed ESG updates, shareholder proposals, & public forums	✓	✓	✓	
Net-Zero Climate Strategy with intermediate targets	✓		✓	

Source: Havard Law School Forum on Corporate Governance

Expanding ESG Performance Metrics

Expand the scope of ESG-linked compensation

Tie executive bonuses to measurable targets along with long-term sustainability goals

Onboarding form and matching system

Supplier Compliance Framework

Strengthen monitoring mechanisms to ensure sustainability & ethical labor standards

- Increase collaboration with suppliers
- Expand partnership

Public Impact Reports & Advanced Progress Tracking

Implement data-driven ESG performance tracking & publish annual performance dashboards

Always compare progress to sustainability goals

COSTCO WHOLESALE WILL

- Reach a higher position in a competitive retail landscape
- Enhance customer loyalty & brand recognition
- Meet the high demand for ESG initiatives

1

Key metrics

Reduction in CO_2 emissions
Renewable energy adoption
Sustainable supply chain practices

2

Key Support

Determine eligible supplier for the certification support program

3

Key Engagement

Promote customer-centric governance (e.g., cashback donation, impact reports) & host annual ESG-focused meetings

FEASIBILITY ANALYSIS

Green+ Membership: Revenue

Assumption and Drivers

28% environmentally conscious customers

11% additional amount of money customers willing to pay for ESG products

3% annual growth rate of the number of warehouses

3% annual growth rate of executive members

$3000 average annual spending per customer at Costco

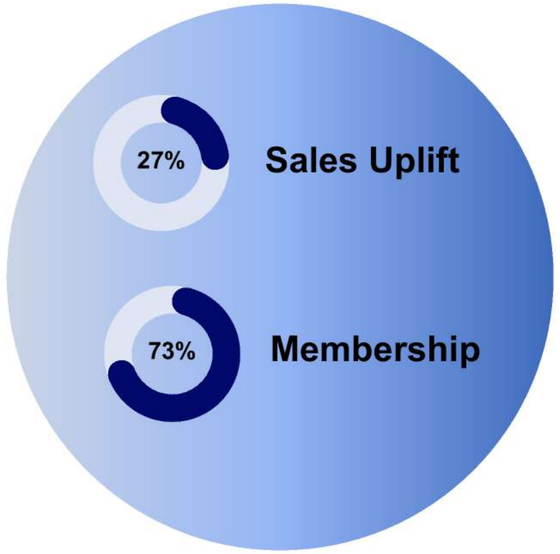
Cash Flow (2025 - 2029)

Total Added Revenues (thousands)	2025F	2026F	2027F	2028F	2029F
Sales Uplift	28,973	31,350	33,922	36,705	39,717
Membership Revenue	$78,306	$84,731	$91,682	$99,204	$107,343
Total	$107,279	$116,081	$125,604	$135,909	$147,060

WACC = 11.25%

Discounted to 2025

Present Value in 2025: $508M



Methodology

Sales Uplift = # of Green Members x Avg Spending Increase

Additional Membership Fees = # of Green Members x $9 Additional Annual Fee

Source: Bain & Company

Green+ Membership: Cost

Assumption and Drivers

0.9% - average sales reduction for rewards

$10,000 - subsidy for 100 suppliers

$500,000 - operational cost

89% - COGS/Net Sales

Methodology

Reduction in Sales (Rewards) = Uplift Sales x 0.9%

COGS = Uplift Sales x 89%

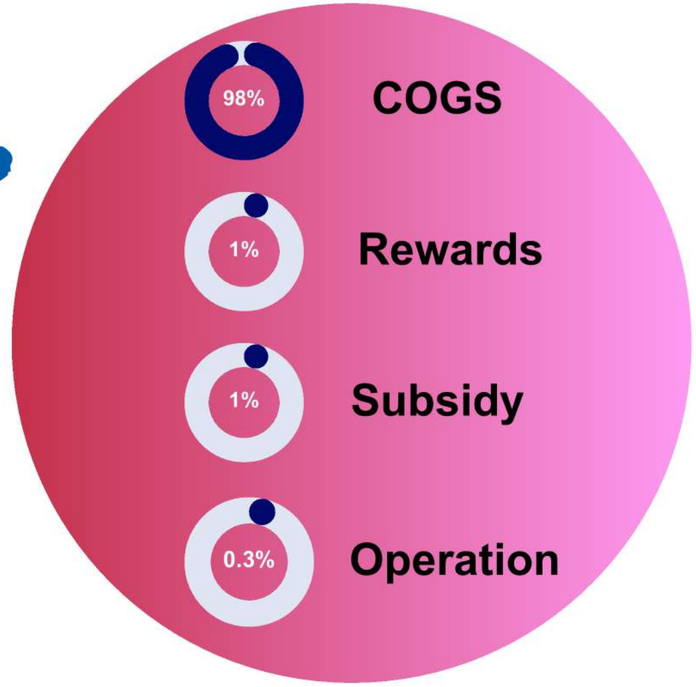
Present Value in 2025: $124M

Cash Flow (2025 - 2029)

WACC = 11.25%

Discounted to 2025

Total Cost	2025F	2026F	2027F	2028F	2029F
(thousands)					
Rewards	$248	$269	$291	$315	$341
Subsidy	$200	$200	$200	$200	$200
Operational Cost	$100	$100	$100	$100	$100
COGS	$25,786	$27,902	$30,191	$32,668	$35,348
Total	$26,335	$28,471	$30,782	$33,283	$35,989



1

Environmental

2

Social

3

Governance

Driving Sustainability: Green+ Membership's Environmental Impact

What Green Membership offers

Higher sales of eco-friendly products => Higher demand

2% bonus cashback on eco-products

Annual Sustainability Impact Report

Highlight individual contributions such as CO2 offset

Educates and motivates members to make greener choices

Cashback donations to sustainability programs

Direct contribution to certified green initiatives and community projects

Shift in Customer Behavior

Support long-term lifestyle changes for Costco members

Environmental Impacts on Costco

Scope 1

Localize sourcing and reduce emissions from Costco's transportation fleet

Scope 2

Enhance focus on sustainability align with Costco's transition to renewable energy, aiding its goal of 100% clean energy by 2025

Scope 3

CO_2 reduction

Higher eco-products sale reduces lifecycle emissions

Shift to suppliers with lower carbon emissions

Members adopt greener habits, reducing downstream emissions

Cashback donations to green projects contribute to carbon offset

Green Membership - Reduction Target

Up to **7.8 million** metric tons = Eliminate the annual emmision from **1.7 million** passenger vehicles **OR** **954 billion** smartphone charges

1

Environmental

2

Social

3

Governance

Empowering Consumers for a *Sustainable Future*

Affordable Memberships

How does the Green+ Membership draw customer attention?

Only $9 higher than the Executive Membership

More accessibility for customers to participate in without much financial burden

Rewards & Recognition

How does the Green+ Membership motivate consumer behaviors?

2% higher cashback on eco-friendly products

Encourage consumers to make greener choices and adapt a sustainable lifestyle

Community Building & Engagement

How does the Green+ Membership strengthen the community?

Support ethical supply chain through Certification assistance

Introduce impact reports, digital badges, and app milestones

Foster the current supply network and drive demand for sustainable production globally & locally

Build transparency and customer loyalty and foster community pride and engagement

1

Environmental

2

Social

3

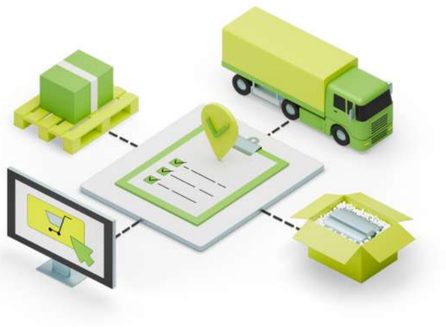
Governance

Driving Accountability And Transparency

Enhanced ESG alignment in executive compensation

- Ensure leadership accountability for sustainability goals by tying executive compensation to measurable ESG metrics
- Align with 75.8% of S&P 500 companies incorporating ESG into executive pay.

Source: Havard Law School



Strengthened Oversight of Supply Chain Sustainability

- Establish sustainability standards through a supplier compliance framework
- Promote collaborative relationships with suppliers through certification support, placing Costco as a responsible procurement leader

Source: StiboSystems

Improved Stakeholder Engagement

- Member-centric governance practices (e.g., impact reports, cashback donation programs) foster greater member involvement.
- Align with 70% of Costco shareholders' expectations to reduce carbon pollution & deforestation

Source: EnvironmentAmerica Research & Policy Center

Potential Risks and Challenges of the Green Membership Program

Financial Risks

Potential for up to **15% increase in upfront program implementation costs** without guaranteed short-term profitability

Increased Costs

Implementing the Green Membership program may require significant initial investment in supplier certification processes, technology upgrades, and marketing efforts.

Uncertain ROI

The demand for the new membership tier might not offset costs, especially if members do not adopt eco-friendly purchasing habits at the expected rate.

10-15% Increased capital expenditures by retailers adopting sustainability

Source: McKinsey & Company

Operational Risks

Risk of **10-20% disruptions in supply chain efficiency** due to compliance or logistical challenges.

Supply Chain Complexity

Sourcing eco-friendly products requires collaboration with suppliers that may not yet meet sustainability standards, leading to potential delays.

Logistics Optimization

Transportation adjustments to accommodate eco-friendly goods (e.g., local suppliers) could lead to inefficiencies and higher distribution costs.

7/9 most common ESG initiatives have significant supply chain components

Source: McKinsey & Company

Other Risks

Reputational Risks

Failure to meet sustainability commitments could harm the retailer's brand image, reducing customer loyalty and impacting sales.

Regulatory Risks

Changing government policies or stricter environmental regulations could increase compliance costs or force program adjustments.

CONCLUSION

Conclusion

Costco's Green+ Membership model drives long-term growth by embracing eco-conscious trends and targeted enhancements, ensuring financial success and environmental impact as a warehouse retail leader.

Revenue Growth Potential

Projected added revenues of **$107M in 2025**, growing to **$147M in 2029**, driven by:

- Sales uplift from eco-conscious "Green+ Members."
- Higher membership fees and a growing premium Executive member base.

Sustainability as a Strategic Asset

- The "Green+ Member" initiative aligns with increasing consumer demand for environmentally responsible practices.
- Green Members alone are expected to contribute **$78M in 2025**, rising to **$107M by 2029**, reflecting both profitability and commitment to environmental values.

Industry-Wide Opportunity

- The warehouse club model is highly scalable, emphasizing cost efficiency and value delivery.
- Expanding eco-conscious membership programs positions Costco as a trendsetter, appealing to the growing market segment prioritizing sustainability.

Costco's Industry Leadership

- As a leader in the warehouse retail sector, Costco has a proven track record of thriving in economic cycles by offering exceptional value to its members.
- Leveraging sustainability can solidify its competitive edge in a rapidly evolving retail landscape.

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