

Teaching to Recognize, Understand, and Solve Trade-offs in Sustainability





A new 360° case study
format



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Agenda

- | | | | |
|--|-------|-------|--|
|  | 14.00 | 14.15 | Brainstorming: Where are trade-offs and tensions in sustainability? |
|  | 14.15 | 14.25 | Summary of brainstorming |
|  | 14.25 | 14.45 | A new 360-degree case study approach: Navigating tensions and trade-offs in Coop's sustainability portfolio |
|  | 14.45 | 15.00 | Q&A and open discussion |



Exercise: Brainstorming Trade-offs

5 minutes - Individually

Write down 3 instances where you consciously had to make a trade-off about some aspect of sustainability, **WHILST AT A SUPERMARKET**

10 minutes – Per Table

At your table, cluster your trade-offs.



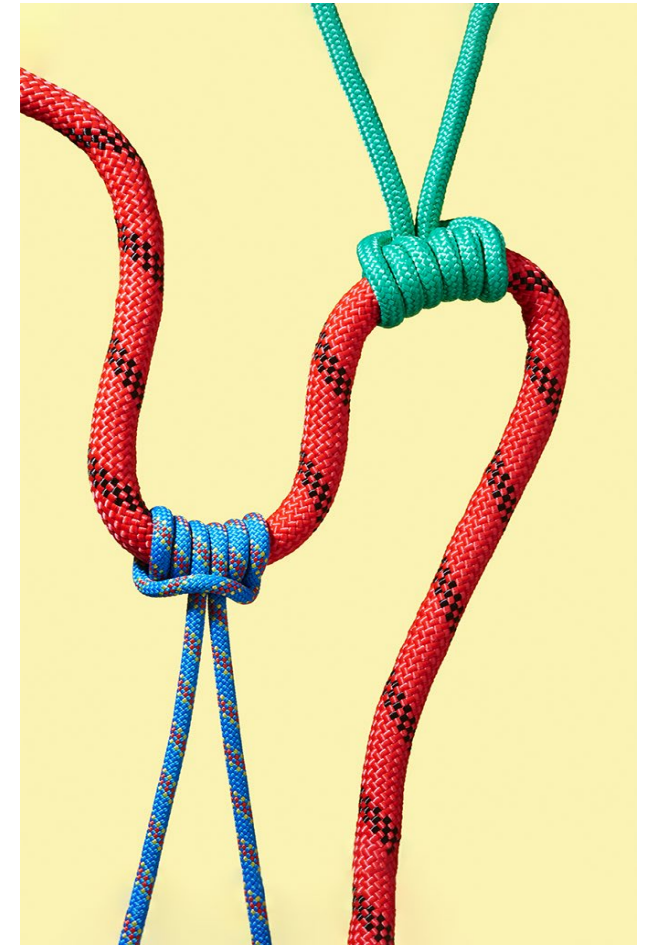
Tension and trade-offs in sustainability

A tension is a **competing demand between the economic, social, or environmental elements of sustainability.**

Tensions are inherent in sustainability decision

Tensions arise everywhere in sustainability decisions

- Between dimensions of sustainability: planet-profit considerations
- Inter-temporal tensions: over time and between generations
- Spatial tensions: between countries and regions
- Cost-impact tensions: the marginal costs of avoidance



Three perspective on tensions

Win-win perspective

- Financial profitability can be aligned with social and environmental dimension
- Corporate priorities “dictate” social and environmental issues
- Only engage in sustainability when its financially profitable
- The “Business case” for sustainability
- Useful emphasis for companies at the beginning of their journal but widely overemphasized and limited in reality

Trade-off perspective

- Exchange of one benefit for another benefit
- Managers must prioritize one objective over another and choose between competing demands
- Requires extensive assessment of alternatives
- The ‘static’ tension: an either/or choice

Paradoxical perspective

- Avoid choosing between either/or
- Invest time and resources into finding innovative ways to reconcile sustainability aspects *over time*
- Maintain tensions in order to understand the complexity of competition demands
- Work through the tension rather than resolving it
- Acknowledge that tension may exist, and use maintain tensions to foster innovation, creativity, commitment

Learning objectives

After completing the case, the participants are expected to:

- Grasp the **diversity of sustainability challenges** that companies are facing
- Learn to **evaluate sustainability proposal** along several dimensions
- Experience the **challenges of negotiating different pathways** for companies to become more sustainable
- Recognize **key concepts** of corporate sustainability, such as **tensions and trade-offs**



What is a (Harvard) Teaching Case Study?



Available online on int.
case centers

50 case centre
1973-2023

 **Harvard
Business
Publishing
Education**

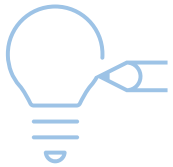
Cases allow developing decision-making skills



- Put yourself in the situation of the protagonists
- Ask yourself “What would I do?”



- Analyze situations with imperfect information
- Recognize core problems



- Find information and come up with creative solutions
- Apply theoretical concepts to practical problems
- Get comfortable with making decisions

What is new about our case?

Traditional Teaching Case

- Focus on a single challenge, challenging decision situations
- Select a single company that is ideal for illustrating a specific problem (R&D, supply-chains, strategy making)
- Students using the case all adopt the identical perspective

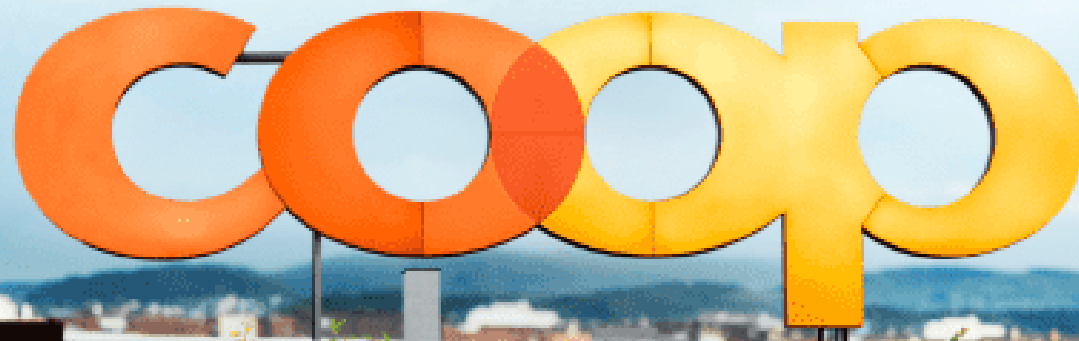
Our Teaching Case

- Illustrate the challenge of managing challenges across an entire company
- Provide a holistic perspective on sustainability, including environmental, social, and governance issues
- Highlight the tensions and trade-offs involved in managerial decisions



A 360-degree case study in which we examine one company from all different angles

Navigating tensions and trade-offs in Coop's sustainability solution portfolio



Coop: A century-old sustainability leader

Coop is the largest food retailer in Switzerland and a global sustainability leader in its sector. Founded in 1864, Coop is a cooperative **managed by a Board of Directors** and led by an executive committee. **The Board is concerned about** growing sustainability challenges, the rise of sustainability-conscious consumers, and competitors **eroding the firm's competitive advantage as a sustainability leader.**



Joos Sutter, Chairman



Markus Beer



Michela Ferrari-Testa



Michael Fuhrer



Bernard Rüeger



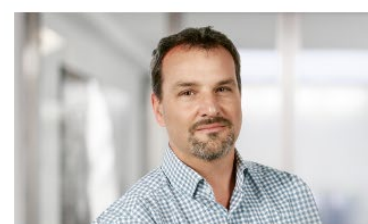
Doris Leuthard, Vice-Chairwoman



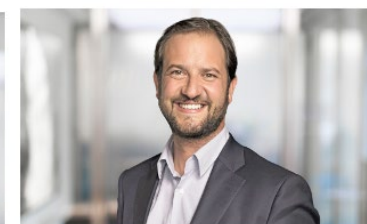
Susanne Giger



Petra Jörg



Grégoire Ribordy



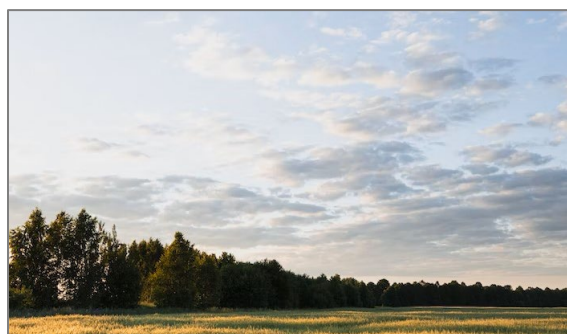
Karim Twerenbold

The CEO's task

- Coop's Board of Directors has identified that Coop needs to work on its portfolio of sustainability actions.
- The Board of Directors has asked Coop's CEO, Philipp Wyss, to prepare proposals on how Coop may address important sustainability challenges.
- Mr. Wyss has commissioned proposals on seven sustainability challenges based on the company's materiality matrix and submitted them to the Board.
- The proposals suggest paths to address each sustainability challenge for the next 2 and 10 years.



Coop's seven most pressing sustainability challenges



Reducing emissions in logistics

- Electrify the diesel-powered trucks owned by Coop
- Cooperate with other retailers on a 'last-mile' distribution system



Reducing value chain emissions

- Methanogen inhibition in cows via feed additives
- Support the development of cell-cultured based meat



Reducing food waste

- Develop a new Coop app, in-store smart pricing and marketing to help purchase about-to-be-wasted food
- Digitize Coop's operations to improve stocking and avoid waste



Reducing plastic waste

- Analyze existing packaging and focus on reduction in volume and recyclability
- Invest in R&D into chemical recycling, edible coatings, etc.



Improving human rights

- Identify and track the risks of human rights abuses in the supply chain
- Create a label to make these visible



Fostering a sustainability culture

- Exchange and education platform



Enhancing biodiversity

- Points scheme with Pro Specie Rara to support heritage vegetables
- Invest in regenerative agriculture with Swiss farmers



Proposal example

- 1 Sustainability challenge introduction
- 2 Proposal's title, core idea, and summary
- 3 Proposal's phase 1 and 2 budgets
- 4 Proposal's impact and viability evaluation

1 Proposal 1: Reducing scope 1 emissions in logistics

Scope 1 emissions occur from sources that are controlled or owned by companies. Globally, road transport is responsible for 25% of the yearly CO₂ emissions and substantially contributes to climate change.³⁰ For food retailers, the transportation of goods from suppliers to distribution centres and stores is central to their way of operating and a major source of scope 1 emissions. Coop has worked on reducing its emissions in transport primarily by changing the means of transportation e.g. switching transport operations to rail.³¹ However, reducing emissions from logistics remains a challenge, and this proposal addresses that in some part.

2

3

4

Section	Content																												
Core idea	Reducing CO ₂ emissions from logistics between distribution centres and stores through electrification and cooperation.																												
Summary	Coop will reduce GHG emissions by switching from diesel to electric vehicles in Coop's truck fleet. Energy use would be further reduced by redesigning the last-mile delivery process, focusing on building a collaboration with other last-mile delivery firms to share loads and optimising routes through automation.																												
Expected results	<ul style="list-style-type: none"> Reduced total number of trucks by optimising transportation of goods. Reduced GHG emissions as a result of reduced truck numbers. 																												
Timeline and budget	<table border="1"> <tr> <td>Next 2 years</td> <td>Coop replaces an average of 27 diesel trucks per year when reaching their end of life at 15 years-old, with e-trucks.</td> <td>Budget: CHF 20 Mio</td> </tr> <tr> <td>Next 10 years</td> <td>Build a shared 'last-mile' distribution system with other retailers to reduce emissions.</td> <td>Budget: CHF 20 Mio</td> </tr> </table>	Next 2 years	Coop replaces an average of 27 diesel trucks per year when reaching their end of life at 15 years-old, with e-trucks.	Budget: CHF 20 Mio	Next 10 years	Build a shared 'last-mile' distribution system with other retailers to reduce emissions.	Budget: CHF 20 Mio																						
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Risks and obstacles	<ul style="list-style-type: none"> Charging infrastructure at logistics centres must be built and tested. Longer charging times. High-upfront investments in e-trucks, which is subject to uncertainties, such as future development of energy and battery prices and the residual value of trucks. Stockout risk because of food order quantity reduction and hard-to-predict demand. Building a collaboration with competitors could be challenging. Load redistribution over a reduced number of trucks is an obstacle, requiring a high level of digitalisation of logistics and purchasing processes. 																												
Impact	<table border="1"> <thead> <tr> <th></th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>Environmental</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Reduction of 1/3 of Coop's Scope 1 emissions, equal to 32.3 tCO₂/year per truck saved.</td> </tr> <tr> <td>Social</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Fewer employees needed to maintain and operate the truck fleet (medium negative); Reduced air and noise pollution (small positive).</td> </tr> <tr> <td>Economic</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Food order reduction implies sales reduction of suppliers (small negative); Improved efficiency in process (small positive).</td> </tr> </tbody> </table>		1	2	3	4	5	Comment	Environmental						Reduction of 1/3 of Coop's Scope 1 emissions, equal to 32.3 tCO ₂ /year per truck saved.	Social						Fewer employees needed to maintain and operate the truck fleet (medium negative); Reduced air and noise pollution (small positive).	Economic						Food order reduction implies sales reduction of suppliers (small negative); Improved efficiency in process (small positive).
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How to read the impact scores

	Dimension description	Very high (5)	Very low (1)
Environmental	Reflects the depth, extent, and persistence of the board proposal's influence on the local environment (e.g., city), broader ecosystem (e.g., region, country) and global climate.	The proposal has a profound, comprehensive, and permanent influence on the local environment, broader ecosystem or global climate. For example, the permanent restoration of an ecosystem endangered by the agricultural activity of Coop suppliers.	The proposal has a significant negative influence on the local environment, broader ecosystem, or global climate. For example, the proposal would deplete local, non-renewable resources and endanger the balance of the broader ecosystem.
Social	Reflects the depth, extent, and persistence of the board proposal's influence on local communities and broader human populations directly or indirectly affected by the firm's operations and value chain.	The proposal makes profound, comprehensive, and permanent improvements to local communities and broader human populations. For example, ensuring non-discriminatory hiring practices in all the firm's suppliers.	The proposal accentuates and perpetuates negative social impacts on local communities and broader human populations. For example, the proposal would continue to rely on a value chain where human rights violations have been reported.
Economic	Reflects the depth, extent, and persistence of the board proposal's influence on the local economy, the firm's value chain, and the firm itself.	The proposal brings deep, widespread, and permanent benefits to local economies, to the firm's suppliers and customers, and to the firm.	The proposal represents high, continued costs and reduced revenues for value chain companies or Coop itself, as well as for local communities (e.g., in the form of reduced fiscal revenues, job losses, industry relocation).

How to read the viability scores

	Dimension description	Very high (5)	Very low (1)
Time	Reflects the speediness with which the board proposal can be implemented.	Indicates projects that can be successfully implemented within a few months of its approval with measurable impacts in the short term.	Indicates projects whose completion could take several years and whose effects will only be noticeable in the long term.
Simplicity	Reflects the number and complexity of tasks involved in the board proposal's implementation, the number of partners involved, and the amount of non-specialised knowledge and skills required.	Typical of projects with few, simple tasks involving only a reduced team of Coop personnel with the knowledge and skills required to complete the tasks successfully.	Indicates a project involving a very high number of specialised tasks requiring the involvement of large teams from different divisions in Coop and specialised partners such as technology providers, who bring highly specific knowledge and skills.
Control	Reflects the firm's independence from the actions of second and third parties for successfully implementing the board proposal.	The proposal's outcomes entirely and exclusively depend on Coop's actions. For example, the reduction of energy consumption in in-store refrigeration by acquiring commercially available technologies.	Indicates that the proposal's outcomes are almost entirely dependent on the actions of Coop suppliers, customers, and others such as legislators or technology providers. For example, the approval of new national or international legislation that establishes stricter retail industry standards.

Proposals overview

Sustainability challenge	Solution (next 2 years)	Budget (million CHF)	Solution (next 5 years)	Budget (million CHF)
Reducing emissions in logistics	Electrification of truck fleet	39	Shared last-mile distribution network	20
Reducing value chain emissions	Deploy methanogen inhibitors	20	Support culture-based meat	50
Reducing food waste	Expand Coop app and smart pricing	57	Digitalise operations	40
Reducing plastic waste	Packaging analysis and redesign	31	R&D on chemical recycling	50
Improving human rights	Human rights label	10	Supply chain due diligence	20
Fostering a sustainability culture	Exchange and education platform	20	Maintain and expand platform	20
Enhancing biodiversity	Heritage vegetable scheme	30	Regenerative agricultural advice to farmers	40

Budget rules

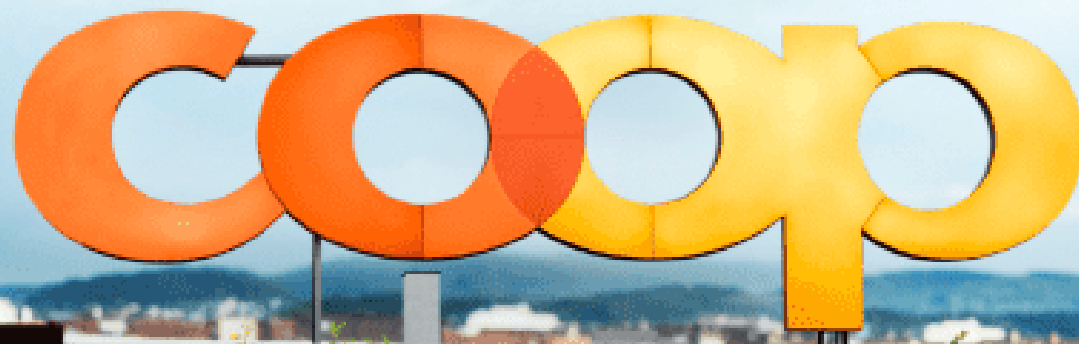
- Available budget: **CHF 280 million**
- Free allocation below limit; no obligation to use the entire budget
- Minor proposal adjustments are allowed as long as their budget stays the same
- Independent proposals can be combined; Phase 1 is *not* required for Phase 2

Your assignment

- You are a **member of Coop's Board of Directors**. Together with your colleagues, you need to discuss the seven sustainability proposals, which were prepared by the Executive Committee to help Coop be as sustainable as possible in the short and medium term.
- **Together you must combine the proposals into one single portfolio to be presented to external stakeholders.**
- Due to financial and other constraints, **you cannot implement all proposals** – creative ideas on how to mix and match might be necessary!
- At the end of the meeting, **you will present your portfolio proposal** to the annual assembly of Coop's regional cooperatives.



Impressions and additional material



Target learning groups

The case study is **suitable for all levels of study**: Undergraduate, graduate, executive

Participants studying the following topics, among others, would find this case study insightful:

- Management
- Environmental science
- Corporate strategy
- Environmental management
- Corporate sustainability
- Sustainability management
- Engineering

Class size:

- We recommend **15 to 30 participants working in groups of 5 to 7 participants.**
- Depending on the group size adjust
 - # of sustainability challenges
 - # board members;
 - # of parallel board meetings

Navigating tensions and trade-offs in Coop's sustainability solution portfolio

Emily Elsner, Oliver Akeret, Nora Meier, Alejandro Nuñez-Jimenez, Johannes Meurer, Volker H. Hoffmann

ETH Zürich



© 2023 by Group for Sustainability and Technology, ETH Zurich. This exercise is part of a teaching case study and aims to provide material for class discussion rather than to illustrate either effective or ineffective handling of a management situation. The described case situation is partly fictitious, particularly with regard to the suggested solutions. The case was compiled from published sources. No part of this publication may be copied, stored, transmitted, reproduced, or distributed in any form or medium whatsoever without the permission of the copyright owner.

Case Study

Extensions

Sustainability at Coop: Extension

As the in-house expert teams begin their work, Coop's PR department issues a press release outlining the firm's plans to rebuild its sustainability portfolio. The press release explicitly mentions the five challenges that Coop has identified.

Within just a few days, however, several highly influential NGOs are criticizing Coop in the strongest terms. They accuse Coop of neglecting influential stakeholders (including the NGOs themselves) and, as a result, overlooking other major sustainability challenges that the comprehensive portfolio of a leading retailer must address.

After a swift round of internal consultations, Coop issues a holding statement welcoming the feedback. Coop pledges to take such comments seriously and revise its list of sustainability challenges. As a result of this process, Coop's CEO, Philipp Wyss, decides to add two additional sustainability challenges and issues a revised budget limit for sustainability actions of 160 million CHF (60 million in the mid-term; 100 million in the long term). The two additional challenges are: (1) Reducing plastic waste; and (2) Fostering a sustainability culture. Figure 1 provides an overview of the updated list of seven challenges and solutions the experts proposed.



Figure 1 Overview of Coop's seven challenges and proposed solutions ("Taten statt Worte" logo translates as "actions, not words"). Image: Author's own work.

After receiving the seven proposals from the CEO's team, you and your fellow Board members begin analyzing the proposals to define a new portfolio of sustainability actions for Coop. Table 1 provides an overview of the seven proposals, separating solutions for the mid-term (approximately in the next two years) and the long-term (approx. in the next 10 years) and the estimated budgets for each solution.

Table 1: Updated overview of the seven sustainability proposals

Sustainability challenge	Mid-term proposal Title	Budget (CHF million)	Long-term proposal Title
Reducing Scope 1 GHG emissions in logistics	Electrification of truck fleet	20	Shared last mile distribution network
Addressing Scope 3 GHG emissions in the value chain	Promote vegan and vegetarian products	20	Support on based in the value chain
Avoiding food waste	Expand the Coop app and smart pricing	5	Digital operations
Enhancing Biodiversity	Heritage vegetable scheme	10	Regenerative agricultural to farms
Improving human rights	Human rights label	10	Supply chain diligence
Reducing plastic waste	Packaging analysis and redesign	30	R&D on circular recycler
Fostering a sustainability culture	Exchange and education platform	20	Sustainable mentoring secondary scheme
Total		125	

Slides



Material

Teaching notes

Teaching note

Navigating tensions and trade-offs in Coop's sustainability solution portfolio

Case synopsis

The case is about Coop, a global sustainability leader in the retail/ supermarket industry. The story is told from the perspective of Coop's Board of Directors, the group within the organization with ultimate responsibility for the company's direction and strategy, who must negotiate and decide on the company's portfolio of sustainability actions. The Board of Directors requests Coop's CEO, Philipp Wyss, to commission sustainability proposals on a range of topics relevant to the organization so the Board can choose a selection of ideas to build a strategy. The case's decision point centers on that choice process, and how the Board of Directors should select their portfolio of ideas to maintain Coop's position as a sustainability leader in the retail industry.

Case positioning

The case uses a 360° case study design to provide a holistic perspective on sustainability that includes environment, social, and governance issues.¹ In so doing, it highlights the challenge of managing sustainability projects across an entire company and allows participants to experience the tensions and trade-offs (among sustainability challenges, over time, between regions, etc.) involved in managerial decisions on corporate sustainability.

We have developed this case for use in an MBA or executive education program focusing on corporate sustainability, CSR, strategic sustainability, or environmental management. The case is also suited for Bachelors or MSc students and Executive MBAs, and we have outlined suggestions for drawing attention to either strategic or operational challenges in the case. As the case adopts a holistic perspective and involves a wide variety of sustainability challenges that companies face, it may also be

¹ Kaplan, S. (2019). The 360° Corporation: From Stakeholder Trade-offs to Transformation

This note was prepared by Dr. Emily Elsner, Oliver Akeret, Nora Meier, Dr. Alejandro Nuñez-Jimenez, and Professor Johannes Meurer and Volker Hoffmann for the sole purpose of aiding classroom instructors in the use of "Navigating Tensions and Trade-offs in Coop's Sustainability Solution Portfolio." Funding for the development of this note was provided by ETH Zurich and not by the company. It provides analysis and questions that are intended to present alternative approaches to deepening student's comprehension of business issues and encouraging classroom discussions. The note and the case provide material for class discussion and do not illustrate either effective or ineffective handling of a management situation. The described case situation is partly fictitious, particularly with regard to the suggested solutions. The case was compiled from published sources.

used in environmental sciences or engineering classes. G familiarity with supermarkets and the retail industry, the internationally.

Teaching objectives

The main teaching objectives of this case are to help students:

- Grasp the diversity of sustainability challenges that comp
- Learn to evaluate sustainability proposals along different viability)
- Experience the challenges of negotiating different paths become more sustainable
- Recognize trade-offs and tensions in corporate sustainan
- Learn perspectives and approaches for recognizing, resolving tensions in sustainability decisions.

Learning objectives

After the case, the participants should be able to:

- Assess sustainability proposals for different impacts
- Formulate a coherent sustainability strategy for a corn budget
- Justify and explain the strategy in terms of the trad perspective of the company
- Understand how decision-making happens within a corp

Assignment

Coop is one of the one of the most sustainable retailers in the long commitment to sustainability. Yet, the growing sustainabi rise of sustainability-conscious consumers have led you and y Coop's Board to question the impact of your firm's sustana address this challenge, you and the Board ask Coop's CEO, Ph you with options for expanding the company's portfolio of susta You are now preparing for the next meeting of Coop's Board of D aware that although all Board members share the goal of makin Coop, each member has a different viewpoint. Therefore, the B negotiate which proposals should be approved. As a result of th need to agree on and select a portfolio of proposals that Co



Thank
you!
Q&A



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