Climate Strategy for EssilorLuxottica

2025_5AXI11_01 - Climate Strategies for Organisation

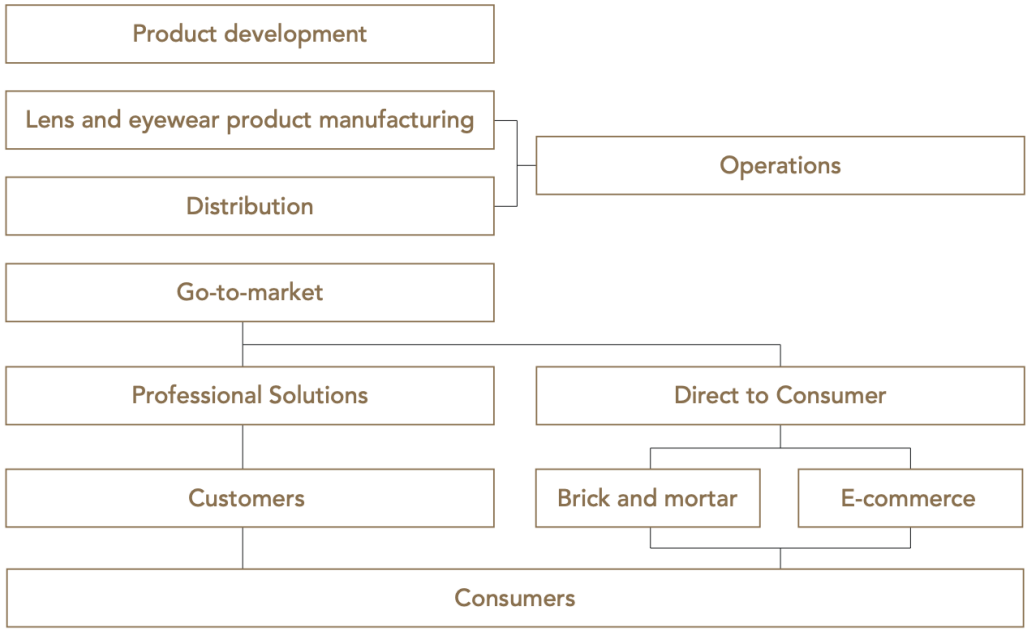
EssilorLuxottica

Introduction to the Company & Challenge

Global leader in eyewear industry

- Formed in 2018 through the merger of the French lens manufacturer Essilor and the Italian eyewear designer Luxottica
- Designs, manufactures, and distributes a wide range of eyewear products, including prescription lenses, sunglasses, and optical frames
- Operates in 150+ countries worldwide
- Employs around 190,000 people globally
- Annual revenue of approx. €24.5 billion

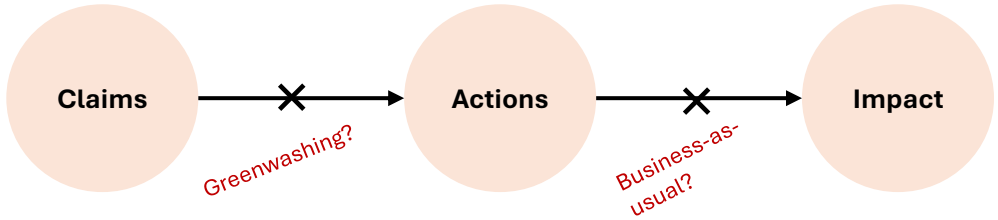
A vertically Integrated Value Chain



Promoting a more sustainable eyewear industry

- Launched sustainability program ***'Eyes on the Planet'*** in 2021
- Introduced projects and initiatives related to carbon and circularity with the goal of embedding sustainability into its business model

Achieving Net-Zero?



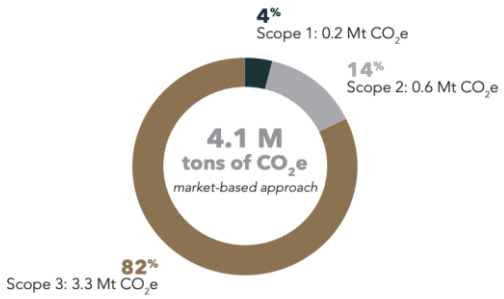
References: EssilorLuxottica (2024)

Carbon Footprint Assessment: Scope 1,2,3

"We are determined not to let carbon cloud our vision. Our efforts are focused on reducing the Group's carbon footprint throughout our entire value chain to help limit the effects of climate change on our planet, for ourselves and for future generations.

EssilorLuxottica's GHG Emissions

- **Total emissions:** 4.1 million tons CO2e per year
- **Scope 1 & 2 emissions:** 18% of total emissions
- **Scope 3 emissions:** 82% of total



Picture source: EssilorLuxottica (2024)

Top five of Scope 3 emissions

1. Purchased goods and services: 52% of Scope 3 emissions
2. Upstream transportation and distribution: 13%
3. Capital goods: 13%
4. Fuel- and energy-related activities: 5%
5. Processing of sold products: 5%

! Scope 3 emissions have increased from 2022 to 2023

References: EssilorLuxottica (2024)

Actions to tackle GHG emissions

EssilorLuxottica's scope 3 emissions represent the majority of its total GHG footprint across all facilities globally, emphasizing the necessity for the company to collaborate with actors both upstream and downstream of its supply chain to effectively reduce its total GHG emissions.

	Most emitting activities	Actions to tackle them
Scope 1	• Refrigerants are the largest source of Scope 1 emissions, making up 46.5% due to cooling system leaks that release high-GWP gases	• Switching to low-GWP refrigerants and implementing regular maintenance to prevent leaks • Implementing advanced leak detection systems can further minimize emissions from cooling systems
Scope 2	• The most emitting activity in scope 2 is the indirect emissions associated with energy, such as electricity consumption used for production machines	• Continue investing in on-site renewable energy production infrastructure (photovoltaic installations) • Invest in more energy-efficient production equipment • Increase the share of renewable energy by working with green energy providers
Scope 3	• The largest source of Scope 3 emissions is purchased goods and services, representing 52% of total Scope 3 emissions	• Collaborate with suppliers to reduce their emissions and adopt sustainable practices • Source products with lower environmental impact (e.g., eco-certified, renewable materials)

References: Global Climate Initiatives (n.d), EssilorLuxoticca (2024) & Sciencing (2017)

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Transition Risks & Opportunities

The transition towards a lower-carbon economy exposes EssilorLuxoticca to extensive risks. Nevertheless, as a multinational enterprise, EssilorLuxoticca has significant opportunities to drive down GHG emissions and shape a more sustainable future.

Risks	1	**Legal Risks: Carbon Pricing & Reporting Obligations.** Operating globally, EssilorLuxottica may be subject to regulatory changes related to climate transitions, such as carbon taxes or new reporting requirements like the CSRD. This transition may include high compliance costs but failure to adhere may result in fines and reputational damage among stakeholders which ultimately negatively affect the bottom line.	Company
	2	**Technological Risk: Transitioning to Low-Carbon Technologies.** EssilorLuxoticca may face risks from the emergence of competing low-carbon technologies such as additive manufacturing or 3D printing. Investing in and adopting such technologies may be costly but failure to do so may result in comparatively higher carbon emissions in areas such as materials, manufacturing, warehousing, and transportation than competitors.	Company
	3	**Market Risk: Changing Customer Demands.** Customers increasingly demand sustainable products, with requirements on everything from material use to recycling opportunities. Failure by EssilorLuxoticca to fully meet these demands may result in customers migrating to more sustainable alternatives.	Ecosystem
Opportunities	1	**Lower-Emission Energy Sources:** By switching to lower-emission sources of energy, EssilorLuxoticca may reduce its exposure to GHG emissions and consequently reduce its sensitivity to carbon cost changes. Additionally, lower-emission sources of energy may generate reputational benefits and consequent rising demand for the company's products.	Company
	2	**Recyclable Frames and Lenses:** Innovating and developing recyclable frames and lenses may allow EssilorLuxoticca to strengthen its competitive position while capitalizing on shifting consumer preferences towards sustainable products, ultimately increasing revenues.	Ecosystem
	3	**Energy-Efficient Production and Distribution Processes:** Improving the energy efficiency of EssilorLuxoticca's production and distribution processes may result in reduced operating costs through direct cost savings and efficiency gains while supporting global initiatives to curb emissions.	Company

References: EssilorLuxottica (2024), Moody Investor Service (2023), Manufacturing Tomorrow (2023) & TCFD (2017)

SWOT Analysis of Current Situation

Strengths

Market Leadership: the largest eyewear company in the world, with a dominant market share in both lenses (Essilor) and frames (Luxottica), giving it significant pricing power and brand visibility.
Strong Brand Portfolio: owns several iconic eyewear brands and licensed luxury brands, catering to both mass- and luxury markets.
Vertical integration: full control over the supply chain ensuring quality control, innovation, and cost efficiencies.
Global Reach: operates in over 150 countries with a vast distribution network spanning retail outlets, optical stores, e-commerce, etc, which further boosts brand recognition and sales.

Weaknesses

Supply Chain Vulnerabilities: EssilorLuxoticca's global supply chain implies sourcing materials from various regions making it vulnerable to disruptions caused by extreme climate events.
High Water Dependency: The manufacture of lenses and frames requires significant amounts of water which is becoming an increasingly scarce resource in some regions in its production network.
Resource-Intensive Manufacturing: The eyewear manufacturing process involves resource-intensive materials like plastics. These processes are energy-intensive and may contribute significantly to carbon emissions.

Opportunities

Rising Demand for Sustainable Products: EssilorLuxottica can leverage the demand for sustainable products by investing in sustainable new product development.
Emerging Trend Towards Circularity: by continuing to invest in circular processes, EssilorLuxottica can reintroduce waste materials in the production cycle, thereby limiting disposal and reducing plastic waste while responding to customer demands for circular products.
Emerging Second-Hand Trend: EssilorLuxoticca can leverage the emerging second-hand trend in frames by implementing bring-back programs and offering second-hand frames.

Threats

Increased Regulatory Pressure: EssilorLuxottica may face increased regulatory pressure to reduce emissions, adopt sustainable practices, and meet stricter environmental compliance. Failing to adapt could lead to fines or other penalties.
Supply Chain Disruptions: physical climate risks such as droughts and heatwaves could disrupt EssilorLuxottica's supply chain, leading to delays, higher costs, or material shortages.

References**:** EssilorLuxottica (2024), Reicheld et al. (2023) & Sidell (2021)

Future Business Model

Circular products embedding biodegradable/recycled materials and extended product life

Partnership
- **Investors within sectors that promote sustainable development, such as sustainable finance**
- **Sustainable material suppliers *e.g. Mazzucchelli***
- Licensing partners
- Distributors
- **Green carriers**

Activities
- M&A
- **Procurement of biodegradable/recycled materials**
- **R&D and Eco-design**
- Manufacturing
- **Material waste recycling**

Resources
- Brand name
- Brands
- **Patents & designs**
- **Retail banners & stores**
- **Sustainable manufacturing & design capabilities**

Value Proposition
- **Sustainable premium eyewear**
- **Providing circular services**
- **Lead in expanding biodegradable and recycled materials and circular services with a holistic vision**
- Promotes sustainable practices in eyewear production and aims to eliminate poor vision globally

Customer Relationship
- Customer service online and in–store
- CSR
- **Informing customers about recycling opportunities**

Channels
- E-commerce platforms
- Physical retail stores
- Omnichannel integration
- Optical and healthcare professionals
- Wholesale distribution

Customer Segments
- **Sustainability-conscious consumers with a higher willingness to pay**
- Fashion-conscious consumers who value style and brand-prestige
- Optical consumers → seeking vision correction
- **Opticians and healthcare providers with sustainability focus**
- Ophthalmologists

Cost Structure
- Store maintenance
- Repair, recycling, and rental
- Licensing fees
- **R&(eco)D**
- Taxes & legal fees
- **Biodegradable/recycled materials**
- Employee wages
- Manufacturing, logistics & distribution

Revenue Stream
- Sales of lenses, frames, and sunglasses in physical and online retail stores
- Revenue from eyewear services (e.g. digital eye exams)

References: EssilorLuxottica (n.d)

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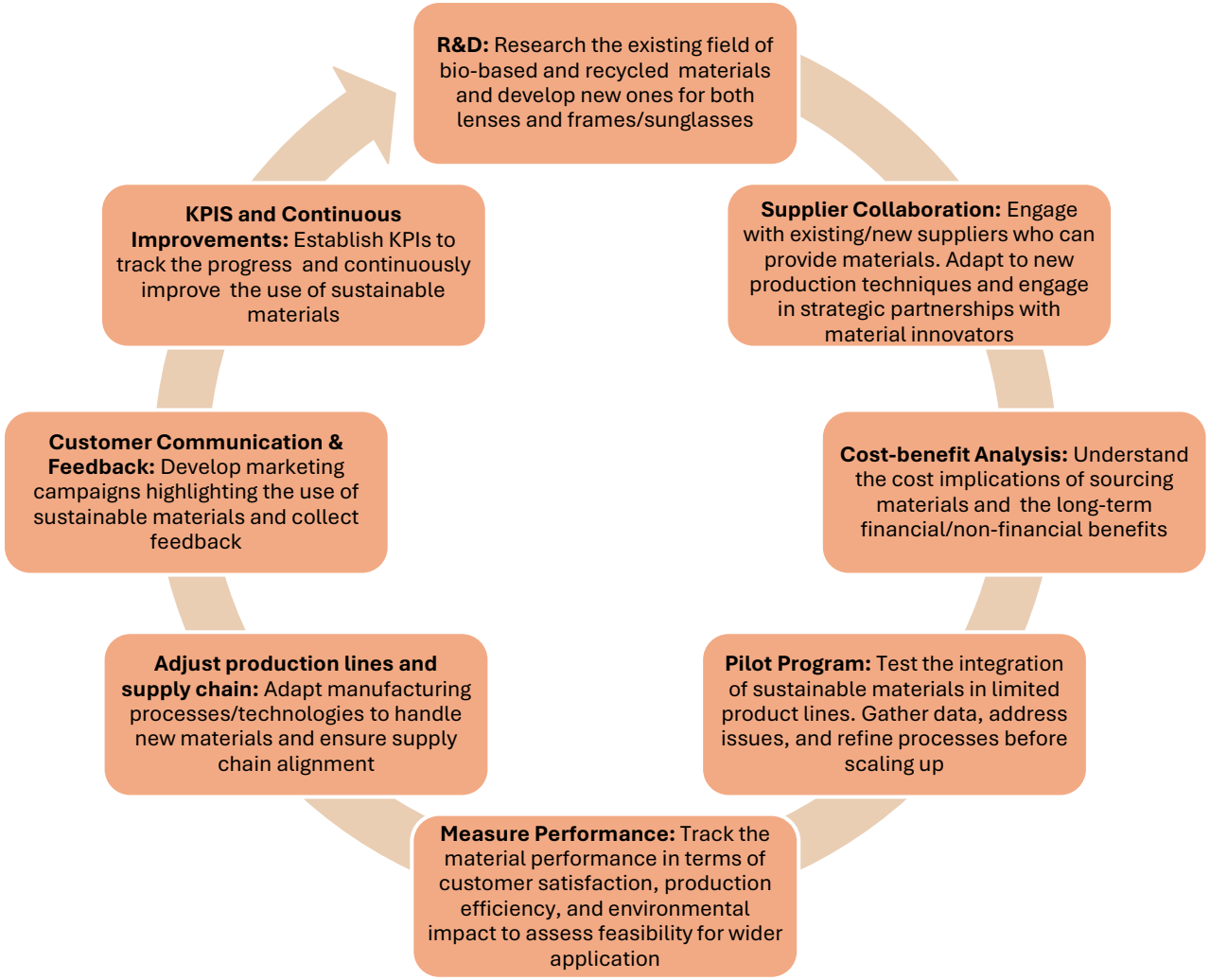
Change Management

Using biodegradable and recycled materials in lenses, frames, and sunglasses to drive sufficiency



Implementation Requirements

- R&D sub-department focused on bio-based and recycled materials
- Investment in Lifecycle Assessment (LCA) Software (to be used in cost-benefit analysis)
- Investments in new machinery and equipment
- Train and educate employees on maintaining quality standards, optimizing efficiency, and processing new materials effectively
- Educate customers on the benefits of sustainable materials and processes, highlighting the positive impact
- Regulatory compliance in all markets where products are sold

References: Gopha (n.d) & Sustainability Directory. (n.d)

Assessing Potential Actions

Assessing the potential actions that will help EssilorLuxottica tackle climate change

	Action	Carbon Gain	Economic Feasibility	Operational Feasibility
Short term	Switching to LED lights across all production facilities	Low	2	2
Short term	Replace outdated refrigerants with eco-friendly alternatives	Intermediate	2	2
Middle-term	Implement carbon-neutral shipping solutions	High	1	2
Middle-term	Switching to green/renewable energy sources across all production, distribution, and store facilities	High	0	1
Long-term	Achieving net-zero commitment (Implement carbon offset projects where emission reductions are not immediately possible)	High	1	0
Long-term	Switching to biodegradable and recycled materials in all products	High	0	0

Carbon Gain
High
Intermediate
Low

Economic Feasibility
0 = Large and long investment
1 = Intermediate investment
2 = Small investment

Operational Feasibility
0 = Significant change in skills/resources
1 = Intermediate change in skills/resources
2 = Small change in skills/resources

References: Departmernt of Energy (n.d), Sarkar (2024) & Romuno (2021)

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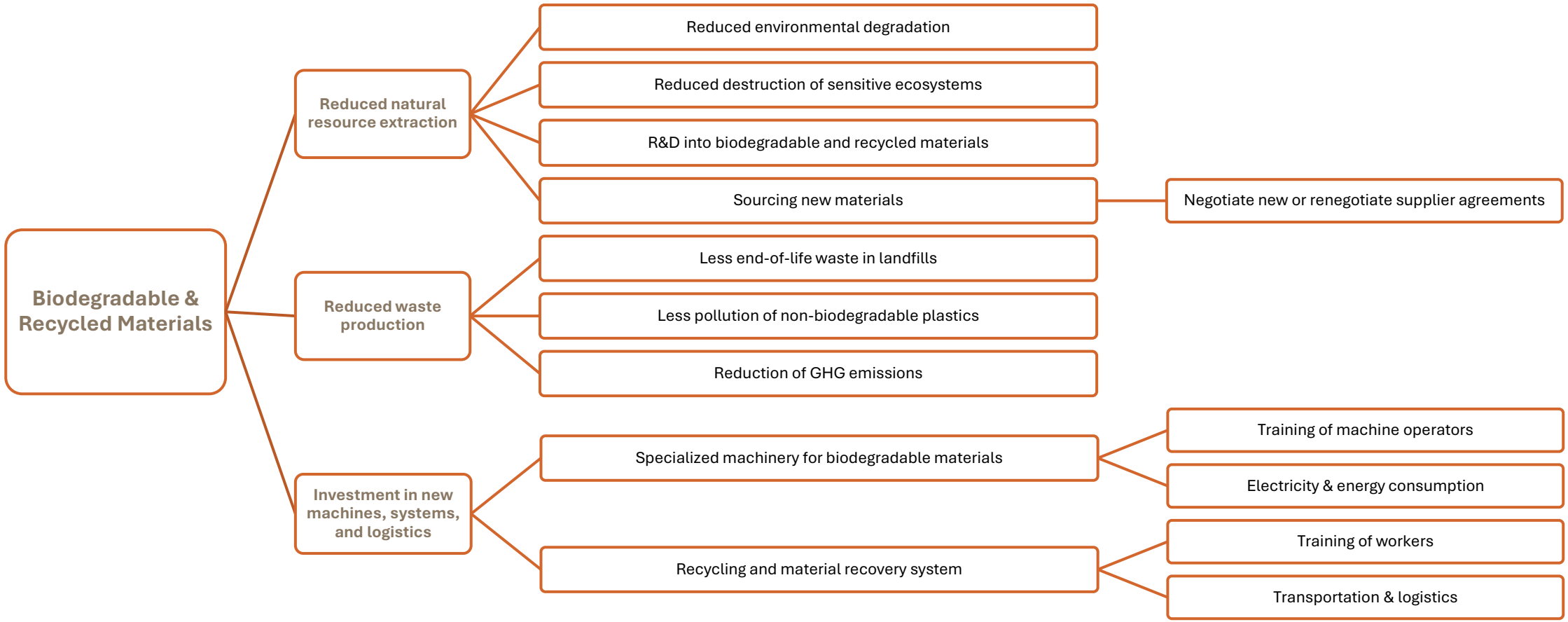
Consequence Tree of Chosen Action

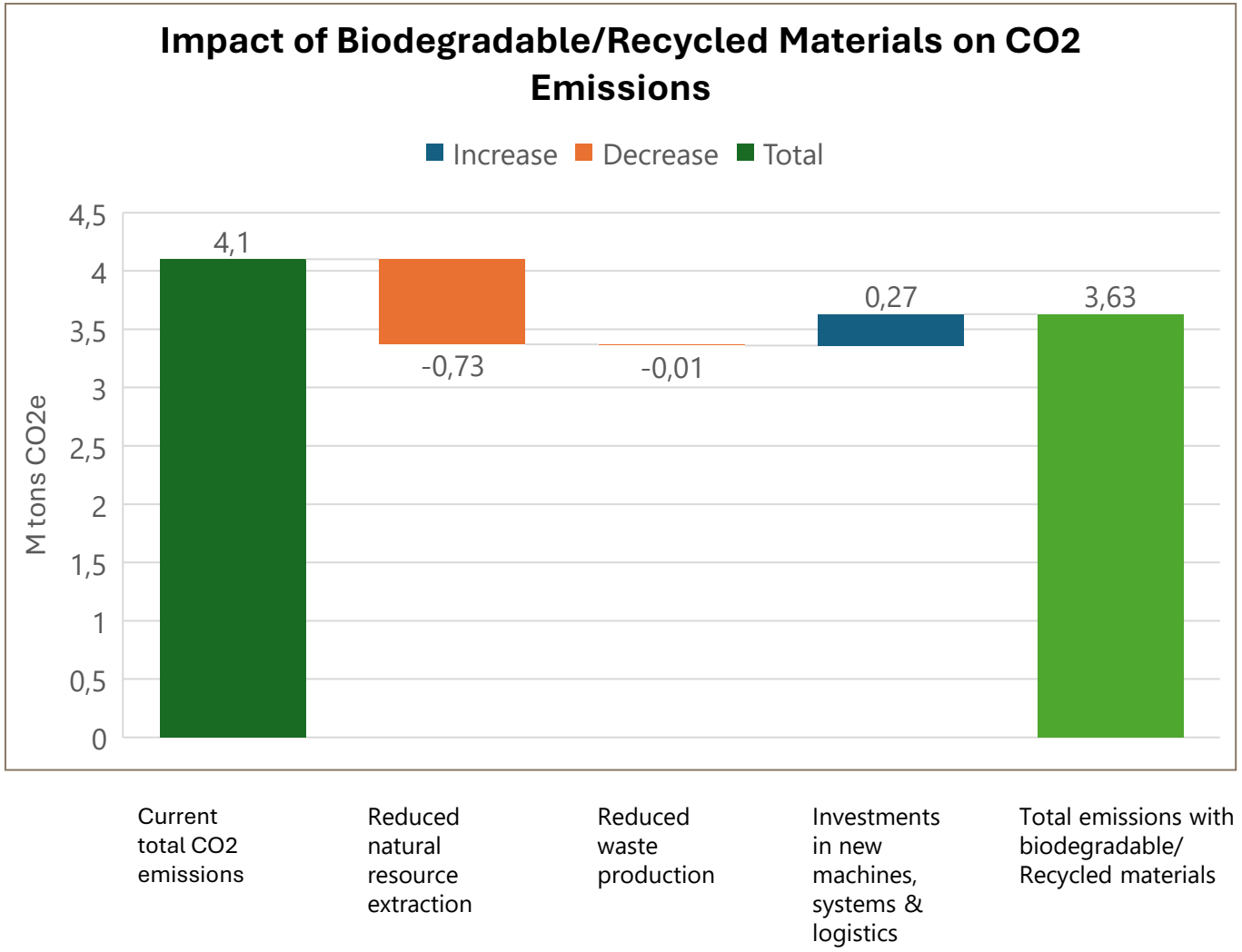
Consequences arising from introducing biodegradable and recycled materials in EssilorLuxottica's products



References: Chan (2024) & World Bio Market Insights (2023)

Emission Scenario

The introduction of biodegradable and recycled materials potentially decrease EssilorLuxottica's total carbon emissions



Current GHG emissions = 4.1 M tons of CO2e

Impact on current total GHG emissions through:

Reduced natural resource extraction

Traditional plastic frames are made from petroleum, which requires a lot of energy and releases a lot of GHG. In contrast, recycled plastics, use much less energy and can cut emissions by up to 80%. Bio-based materials, are renewable, biodegradable, and need less energy to produce, lowering the carbon footprint of eyewear even further.

- Purchased goods from 52% to 30,2% = 1.74824 - 1.015324 = 0,73 (42 % decrease)

Reduced waste production

The eyewear industry produces a lot of waste, from production scraps to discarded frames. Using biodegradable and recycled materials addresses this issue by reusing waste that would otherwise go to landfills. This reduces total waste and emission pollution from burning waste.

- From 0.036477 to 0.025534 (30% decrease)

Investments in new machines, systems, and logistics

Increased CO2 emissions arising from the production of new machines/equipment, upgrading facilities, running new machines/equipment, etc.

- Capital goods from 15% to 23% = 0,773 - 0,504 =0,27

Total reduction potential: 3,63 M tons of CO2e

References: (Eco, 2024) & (EssilorLuxottica, 2024)

Thank you for listening!

Questions?

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