



UNLOCKING SUSTAINABLE EYEWEAR MATERIALS

FROM PROPERTIES & CERTIFICATIONS TO CLEAR CONSUMER MESSAGING

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SEE THE WORLD AT ITS BEST



CHALLENGE

WHICH PRODUCT IS MADE OF SUSTAINABLE MATERIALS?



1



2



3



4



CHALLENGE

HARD TO TELL...

- NO SUSTAINABILITY INFORMATION CLEARLY DISPLAYED ON THE PRODUCT
- LACK OF CLEAR AND SHARED INDUSTRY STANDARDS
- LIMITED KNOWLEDGE AND UNDERSTANDING OF SUSTAINABLE MATERIALS
- ARE MATERIALS REALLY THE ONLY KEY DRIVER TO DEFINE A PRODUCT AS

SUSTAINABLE?

[*https://www.esgtoday.com/eu-parliament-approves-law-banning-misleading-product-sustainability-claims/](https://www.esgtoday.com/eu-parliament-approves-law-banning-misleading-product-sustainability-claims/)

AGENDA

3 STAGES – 3 SKILLS TO UNLOCK



WHY THIS MATTER



**A RECENT STUDY OF THE EU COMMISSION FOUND THAT ABOUT
50% OF GREEN CLAIMS WERE VAGUE AND 40% WERE NOT TRUE***

IF CLAIMS ARE CONFUSING:

→ TRUST OF CONSUMER IS FRAGILE --> CONSUMER ARE DISENGAGED

**TO CLEARLY COMMUNICATE PRODUCT ENVIRONMENTAL CLAIMS,
WE MUST CLEARLY DEFINE WHICH SPECIFIC SUSTAINABILITY ATTRIBUTES THE MATERIALS ACTUALLY HAVE.**

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FIRST STAGE



SUSTAINABLE MATERIALS FOR GLASSES



WASTE CRISIS

Every year over 2 billion tons of waste are dumped and if we don't change, this will almost double by 2050.

As of 2024, only 9% of the plastic waste ever produced has been recycled globally.

Source: UNEP, Global Waste Management Outlook 2024

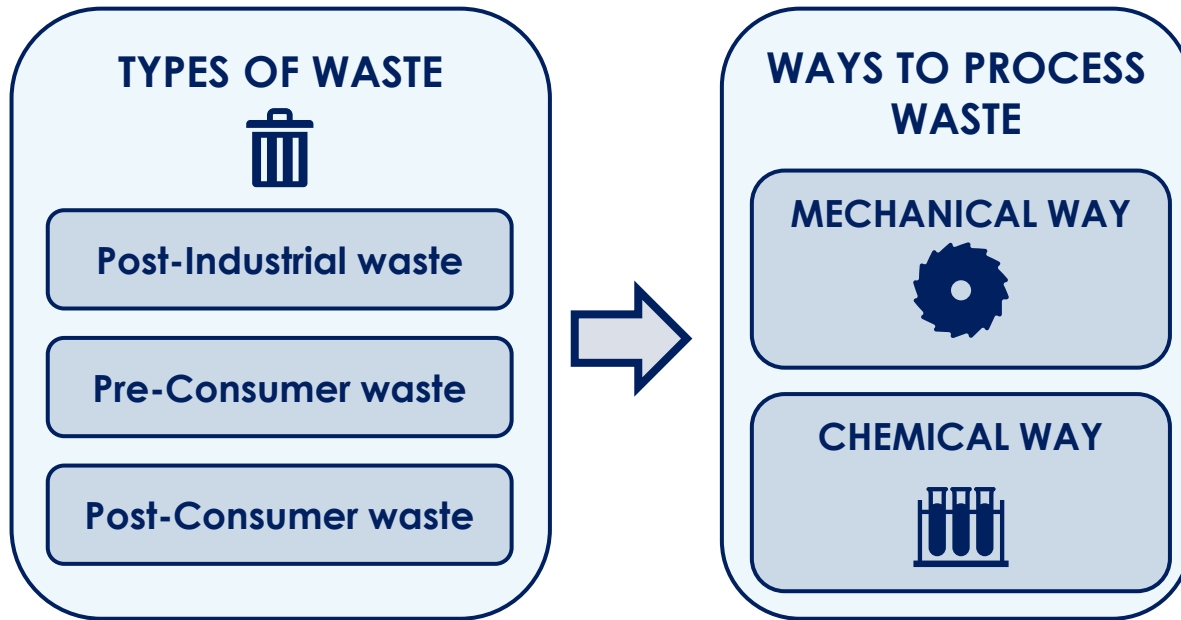
Source: Phys.org, April 2025 – "Global plastic recycling remains stagnant"

MATERIALS ATTRIBUTES

RECYCLED

Derived from waste

Process:



Certification:

Prove the recycled % content



Benefits:

- Less use of virgin materials enabling circularity
- Lower impact on the environment (need to be certified by LCA studies)

Point of attention:

Mechanically recycled materials may have performances and quality issue compared to their standard materials alternatives.

CLIMATE CRISIS

Fossil fuels are the largest contributor to global climate change, accounting for over 75% of global greenhouse gas emissions.

<https://www.un.org/en/climatechange/science/causes-effects-climate-change#:~:text=Fossil%20fuels%20%E2%80%93%20coal%2C%20oil%20and,they%20trap%20the%20sun's%20heat.>

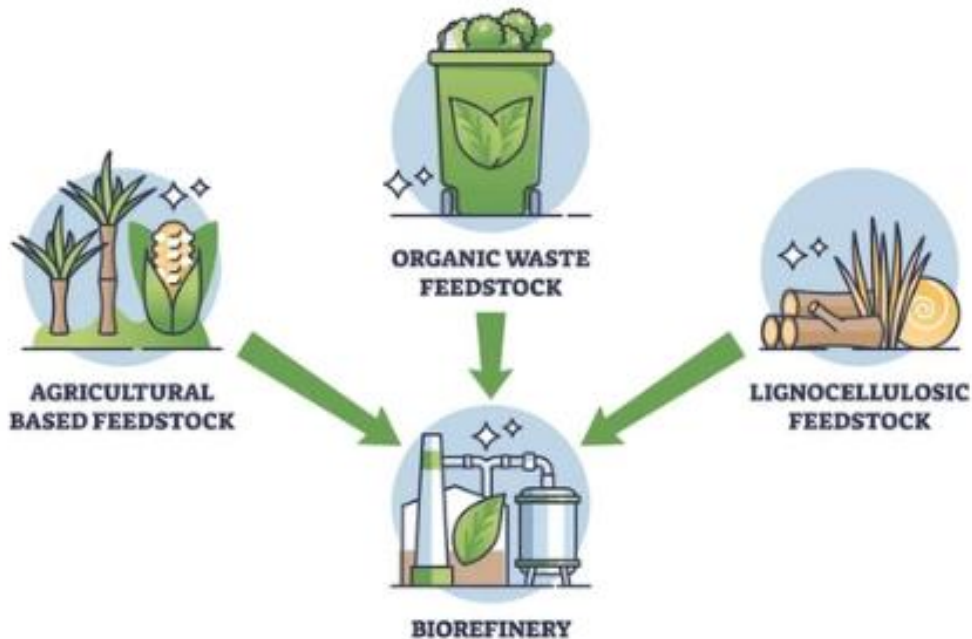
MATERIALS ATTRIBUTES

BIO-BASED



Derived from biological renewable resources

Process:



Certification:

Prove the bio-based % content



Benefits:

Lower environmental impact than petroleum-based materials.

Point of attention:

Biological renewable resources need to be responsibly harvested (not compete with food chain, be part of forest managed responsibly, no use of harmful fertilizers,...)

High content bio-based materials may have performances and quality issue compared to their standard materials alternatives.

MATERIALS ATTRIBUTES

RECYCLABLE:

Capable to be recycled into new raw materials.

- It may **depend on the specific countries' regulations & capabilities.**
- Claim a product as recyclable if:
 - the **entire product is recyclable**
 - is possible to **manually disassemble the product into its components to be recycled individually.**



BIO-DEGRADABLE / COMPOSTABLE:

Capable to be decomposed by living organisms.

- It may **depend on the specific countries' regulations & capabilities.**
- Often lack durability and performance considering glasses requirements.



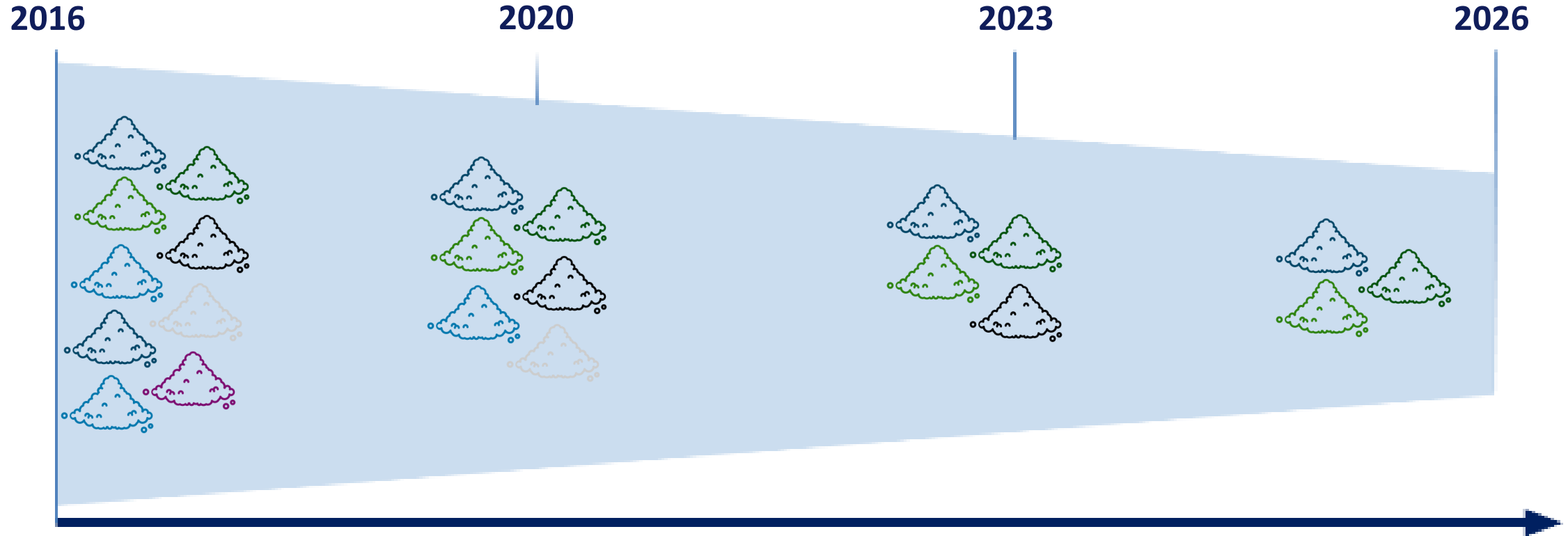
5 MIN. GROUP DISCUSSION



SUSTAINABLE MODEL DEFINITION

- Do you think that there should be a minimum percentage in weight of sustainable content in a product to **consider it sustainable** (i.e. product made with 5% recycled content can be considered as sustainable product?)
- Do you think there should be a minimum percentage in weight of sustainable content in a product in order to be able to perform **environmental claims**. If yes, which would be the threshold?
- Is the consumer willing to **compromise on performance or aesthetic features** for the sake of more sustainable content?

SUSTAINABLE MATERIALS PORTFOLIO EVOLUTION



- ✓ **Minimize tradeoffs on performances & quality** Vs traditional materials
- ✓ **Increase scalability** to lower cost and secure capacity
- ✓ **Robust certification schemes** to zero risk of green-washing

SOME EXAMPLES OF SUSTAINABLE MATERIALS FOR FRAMES & SUN LENSES

FRAME:



RECYCLED

- Tritan™ Renew
- Recycled Metal
- Recycled Polycarbonate



RECYCLED & BIO-BASED

- Acetate Renew
- Tenite™ Renew



BIO-BASED

- Bio Nylon
- Bio Rubber

SUN LENS:

- Tritan™ Renew

- Bio Nylon

SOME EXAMPLES OF SUSTAINABLE MATERIALS FOR FRAMES & SUN LENSES

ATTRIBUTES, CERTIFIED CONTENT & SOURCE

MATERIALS	SUSTAINABILITY ATTRIBUTE			
	RECYCLED 		BIO-BASED 	
	Certified content	Source	Certified content	Source
TRITAN™ RENEW	50%*	Chemically recycled hard-to-recycle plastic diverted from landfill		
RECYCLED METAL	80% **	Metal waste from post and pre consumer's waste		
RECYCLED POLYCARBONATE	95%**	Hard to recycle plastic diverted from landfill		
ACETATE RENEW	27%*	Chemically recycled hard-to-recycle plastic diverted from landfill	43%	Wood pulp from forest sustainably managed (FSC)
TENITE™ RENEW	21%*	Chemically recycled hard-to-recycle plastic diverted from landfill	40%	Wood pulp from forest sustainably managed (FSC)
BIO NYLON			50-60%	Castor seeds (not competing with food chain and able to grow in draught tolerant areas)
BIO RUBBER			30-45%	Castor seeds (not competing with food chain and able to grow in draught tolerant areas)



SKILLS UNLOCK



LEARNING THE PROPERTIES OF THE MATERIALS AND UNDERSTANDINGS THE ADVANTAGES



SECOND STAGE



LIFECYCLE ASSESSMENT: PRODUCT CARBON FOOTPRINT



WHAT IS A LCA?

Product Life Cycle Assessment

Is a process of evaluating the **effects that a product has on the environment** over the entire period of its life. One of the indicator used to calculate the impact on the environment is the **carbon footprint**, namely the quantity of greenhouse gas emissions that are produced or consumed during the life cycle of a product.



CHALLENGE

CAN YOU GUESS WHAT IS THE IMPACT OF 1 PAIR OF GLASSES ON THE ENVIRONMENT?

- 1. 15 KG CO₂**
- 2. 4 KG CO₂**
- 3. 30 KG CO₂**

ANSWER

CAN YOU GUESS WHAT IS THE IMPACT OF 1 PAIR OF GLASSES ON THE ENVIRONMENT?

1. 15 KG CO₂



2. 4 KG CO₂



3. 30 KG CO₂



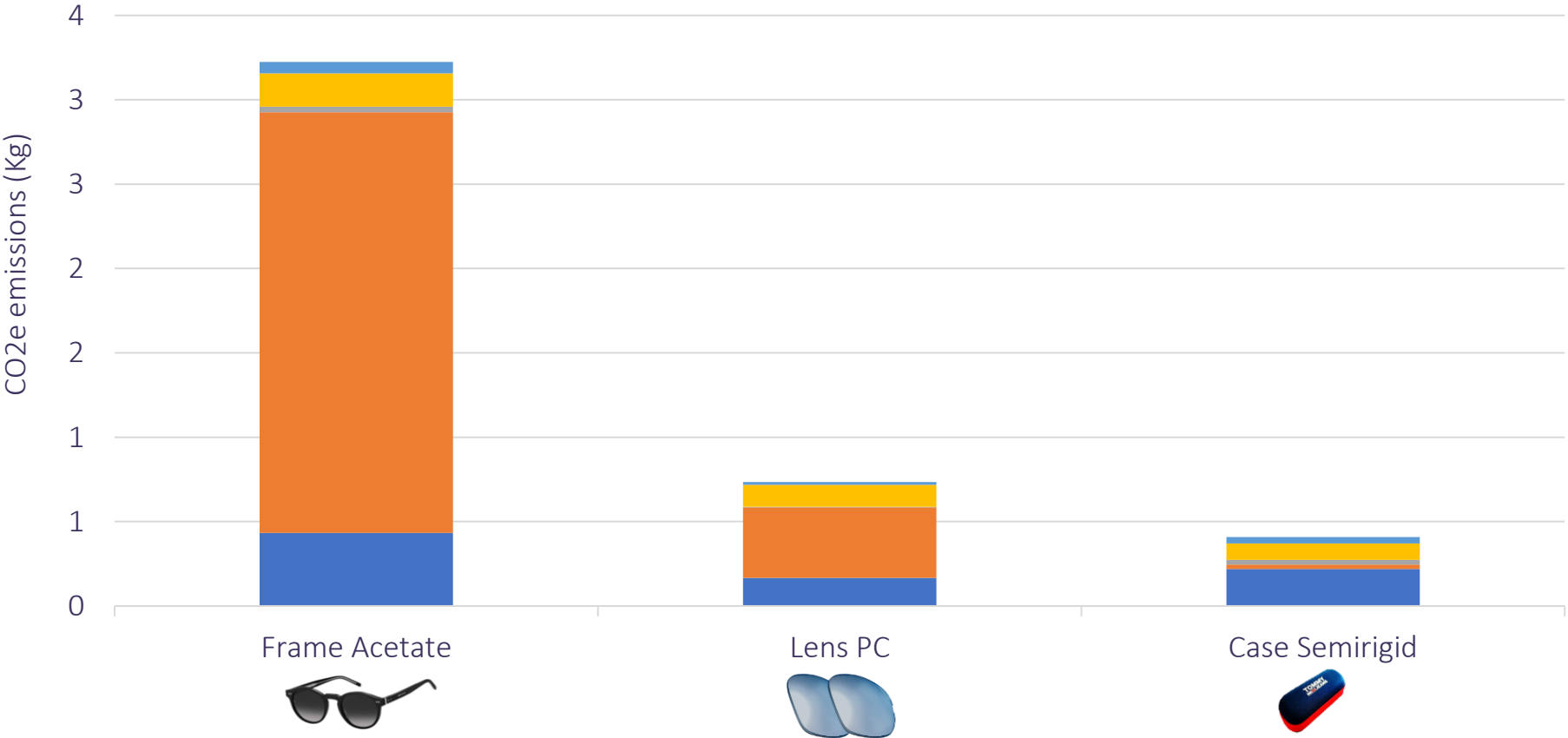
*Average among publicly available LCA results and Safilo internal assessment

**<https://news.mit.edu/2013/footwear-carbon-footprint-0522>

*** Levi Strauss & Co. (LS&Co.): <https://levistrauss.com/wp-content/uploads/2015/03/Full-LCA-Results-Deck-FINAL.pdf>

REVEAL AND DISCUSSION

Product Life Cycle Assessment



Raw Materials



Manufacturing



Packaging



Transport



End of Life

5-10 MIN. GROUP DISCUSSION

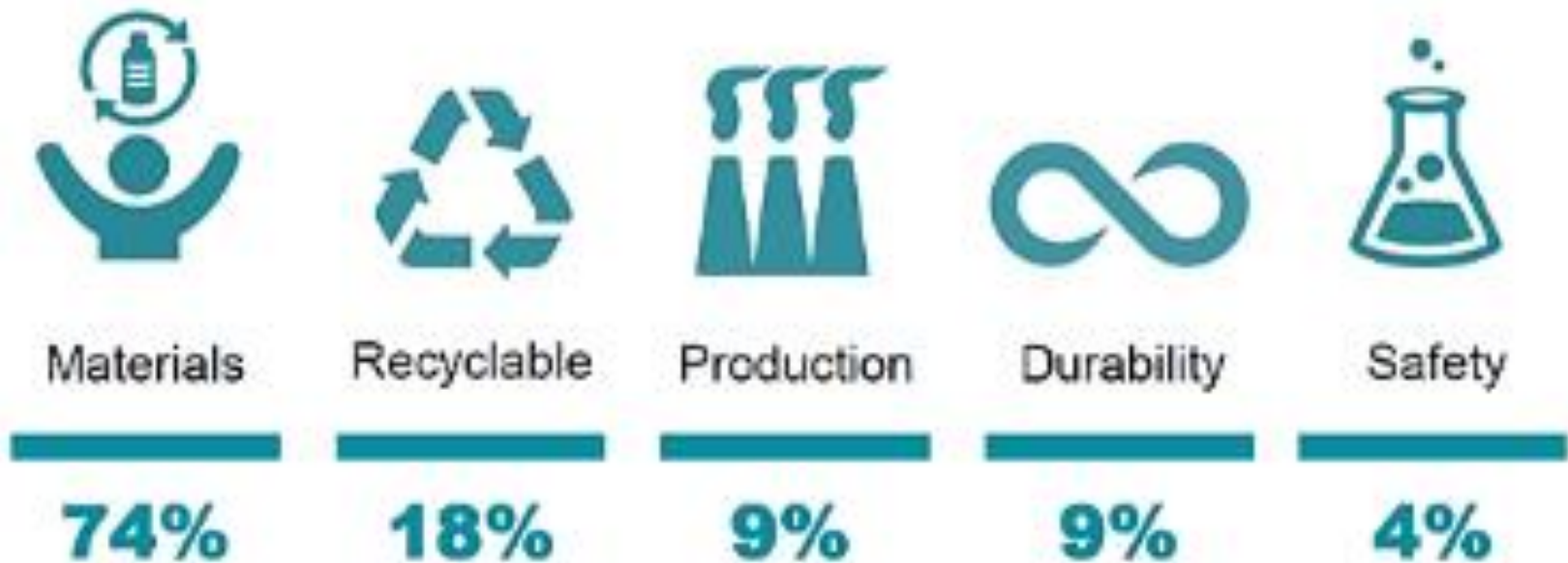


PRODUCT LIFECYCLE

- Most important **drivers** for the consumer to define an eyeglass as sustainable?
 - **Raw Materials** – Recycled / Bio-based content;
 - **Processing & distribution** – Production with renewable energy / shipment by ocean Vs air;
 - **End of life** – Possibility to recycle the product;
 - Other... – Donations related to the purchase / Brand collaboration with ONG/ ...;
- Is consumer ready to purchase considering **carbon footprint** as a purchasing driver? If not, which are the **main barriers**?
 - Lack of interest / feel of urgency compared to other industries like fast fashion;
 - Missing a clear framework with which communicate these features to consumers;
 - Educational gap on this matter;
 - No availability to pay a premium;
 - ...
- Do you think that in next years **consumer will be used to make more conscious decision**, causing a general shift toward products made with at least x% recycled/bio-based content?

MATERIALS MATTER THE MOST for CONSUMER to define SUSTAINABLE SUNGLASSES

U.S. & European consumer* definitions of sustainable sunglasses (unaided responses)



RESEARCH FROM EASTMAN ABOUT HOW TO DEFINE A SUSTAINABLE PRODUCT

Markets	Sample	Method
U.S. UK Germany France	4,000 men & women ages 20-60 nationally representative	primary purchasers of non-prescription sunglasses priced \$10+

Discover more about this research at: <https://allthingsinsights.com/content/sustainability-myth-2-consumers-cant-define-sustainability/>



SKILLS UNLOCK



LEARNING THE PRODUCT LIFECYCLE ASSESSMENT



COMMUNICATION AT THE POINT OF SALE: RISK OF GREENWASHING



CHALLENGE

THE REAL CHALLENGE ISN'T HAVING GOOD QUALITY PRODUCT WITH SUSTAINABLE MATERIALS; IT'S COMMUNICATING IT HONESTLY.

WHICH CLAIM WOULD YOU USE?:

1. ECO-FRIENDLY FRAME
2. FRAME MADE WITH 27% RECYCLED & 43% BIO-BASED ACETATE. THE ACETATE IS ISCC CERTIFIED.
3. SUSTAINABLE GLASSES MADE WITH ACETATE
4. MADE WITH ECO CONSCIOUS MATERIALS

ANSWER

1. ECO-FRIENDLY FRAME
2. FRAME MADE WITH 27% RECYCLED & 43% BIO-BASED ACETATE. THE ACETATE IS ISCC CERTIFIED.
3. SUSTAINABLE GLASSES MADE WITH ACETATE
4. MADE WITH ECO CONSCIOUS MATERIALS

THE OTHER CLAIMS ARE CONSIDERED GREENWASHING!

RISK OF GREENWASHING



New UK legislation puts fashion's green claims under scrutiny



SIMPLE RULES FOR CREDIBLE COMMUNICATION



- 1. BE SPECIFIC – PERCENTAGES, MATERIALS, PROCESSES**
- 2. BE TRANSPARENT – WHERE THE MATERIAL IS USED AND WHERE NOT**
- 3. AVOID ABSOLUTES – NO “100% GREEN”**
- 4. PROVIDE PROOF – UP TO DATE CERTIFICATIONS (GRS,RCS,...)**
- 5. CLEAR FOR EVERYONE - INFO THAT CAN'T FIT INTO THE CLAIM CAN BE EASILY ACCESSED BY CONSUMERS IN ANOTHER WAY (QR CODE, WEBSITE, ...)**

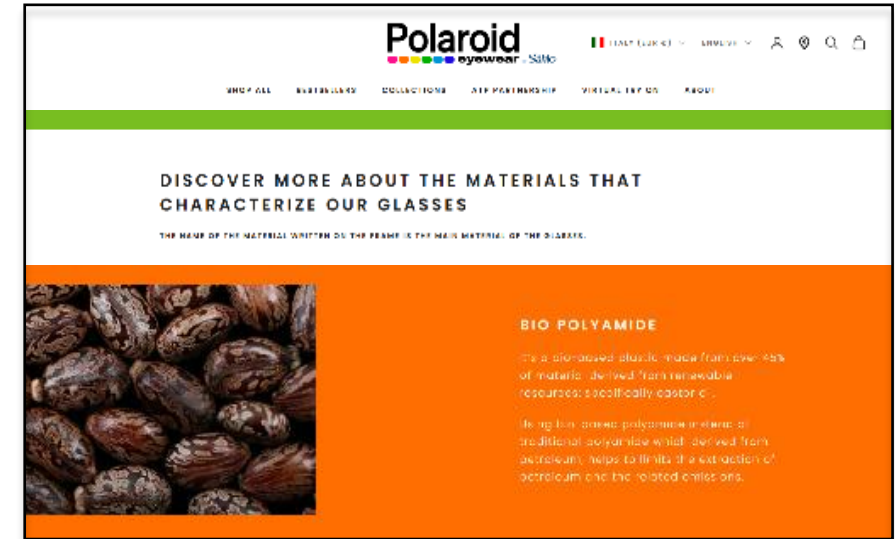
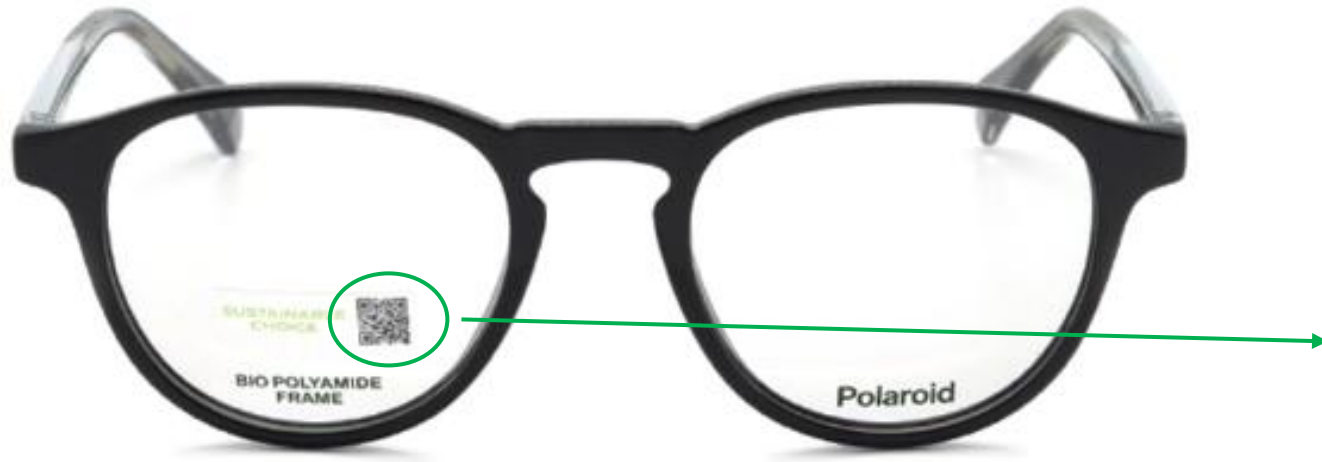
HOW TO APPLY THOSE GUIDELINES

Product limitations to communicate:

- **Space on the product is very limited** (we do not have a t-shirt with a label)
- **Lack of primary packaging** on which write product information



HOW TO APPLY THOSE GUIDELINES



BIO POLYMAIDE FRAME. MADE WITH 45% BIO-BASED CONTENT DERIVED FROM CASTOR OIL. THE ACETATE IS ISCC CERTIFIED.



BE TRANSPARENT
WHERE THE MATERIAL IS
USED AND WHERE NOT



BE SPECIFIC
PERCENTAGES, MATERIALS,
PROCESSES



AVOID ABSOLUTES
NO "100% GREEN"



PROVIDE PROOF
CERTIFICATIONS
(GRS, RCS,...)

5-10 MIN. GROUP DISCUSSION



- Do you think that **customer are already able to understand** sustainability claims?
- Will the customer be more able to understand these claim **as sustainability become a more common topic?**
- Which is the **best solution to engage costumers** in explaining Product Environmental claims?
 - Custom Displays/ Visuals
 - Toolkits/Leaflets/Cards
 - Printings/Stickers on product
 - Digital supports
 - Others



SKILLS UNLOCK



COMMUNICATING SUSTAINABILITY IN A WAY THAT STANDS UP TO SCRUTINY



CONCLUSION

3 SKILLS UNLOCKED



SUSTAINABLE
MATERIALS



LCA
ASSESSMENT



SUSTAINABLE
COMMUNICATION
AND BECOME AN
AMBASSADOR

CLEAR CLAIMS → REBUILD CONSUMER TRUST → CREATE ENGAGEMENT

