### Sustainable packaging





#### SUNFLOWERS TEAM



### Out vision

Our vision is to reduce food packaging waste through replacement and reuse.

Many of the food packages that exist in supermarkets are single-use, that is, you cannot reuse them, thus causing packaging waste, which is a significant environmentally degrading aspect.



VISION



## Solutions

Most problems originate with plastic, glass and aluminum packaging. So we should replace the next ones with something more sustainable, such as:

- Paper Bamboo paper
- Cardboard Bamboo packaging / Mushroom-based packaging materials
- Plastic Bioplastic made from materials such as corn starch, cellulose, or vegetable oil.
- Expanded polystyrene (EPS) Cotton, wool, or cork, or biodegradable plastics.
- Glass Reusable aluminum packaging and stainless steel.

SOLUTIONS



# Paper - Bamboo paper



https://www.instagram.com/disguisetruth/

#### **Sustainability**

- Fastest growing plants
- Cultivation more sustainable than wood
- Biodegradable
- Compostable

#### Strenght

- Strong and durable
- Ideal for long-lasting paper products

#### Water resistance

• High water resistance

#### **Tensile strenght**

- Tensile
- Does not tear easily



#### **Sustainability**

• Synthetic or semi-synthetic

#### Composition

- Materials that use polymers as a main ingredient
- Are made through human industrial systems

Plastic

Most plastics are derived from fossil fuel-based • chemicals like natural gas or petroleum.





#### **Sustainability**

- Biodegradable
- Sustainable Composition



## Bioplastic

• Produced from renewable biomass sources, such as • such as vegetable fats and oils, corn starch, straw, wood chips, sawdust, recycled food waste.

https://www.instagram.com/clairnotclaire/

### EPS



#### **Enverinomental sustainbility**

Eps does not biodegrade, meaning it can persist in the enviorment for hundreds of years



#### **Gas emissions**

Eps requiers the use of fossil fuels, which contributes to greenhouse emissions and climate change

#### **Enverinomental sustainbility**

Natural fiber packaging can be composted or recycled, reducing the amount of the waste

#### **Gas emissions**

Natural fiber packaging requiers less energy than producing EPS, resulting in lower greenhouse gas emissions

### Natural fiber



Photo by Shopify Partners from Burst



Glass

### Aluminium & Steel

### Aluminum

- More economical
- Lightweight
- Not reusable

#### **Stainless Steel**

#### WHY ALUMINIUM CANS ARE THE BEST SOLUTION FOR A CIRCULAR ECONOMY TODAY

Once the aluminium can is collected for recycling, the efficiency of the combined recycling process (sorting, reprocessing and thermal processing) is 90%. Aluminium losses could be further reduced by implementing efficient deposit return systems in some of the key areas. LOSSES IN SORTING, REPROCESSING & THERMAL PROCESSING (EXCLUDING COLLECTION)



- Resistant
- Not reactive to any liquid
- Lightweight
- Very long lifespan
- Reusable

The average used beverage container content of new cans purchased by the consumer is **33%**.



98% 98% of recycled aluminium cans are recycled into products that are recycled again compared with 60% for glass and 20% for PET.



#### **CIRCULARITY IN REAL FIGURES**

Aluminium cans are the most recycled beverage containers globally, with a 71% recycling rate. They also have the highest closed-loop recycling rate, which is when the product is recycled for use as the same product, at 33%.



### PROS

- Biodegradable
- Sustainable
- Reusable
- Reduces Carbon Footprints
- Easily Disposable
- No Harmful Toxins
- Easily Recycled
- It Can Reduce Transportation Costs.



## Conclusion



Finally, by using our recyclable alternatives, we:

- Significantly reduce the amount of waste we generate.
- Promote a more sustainable and responsible lifestyle with the planet.
- Encourage companies to adopt more environmentally friendly practices and to work for a cleaner and healthier future for all.
- We promote the objectives of the European Union 9, 11, 12, 13, 14 and 15 to create a sustainable and healthier planet.



## Thanks



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