















Billions of plastic pieces.

Tons of waste. The gigantic dump that is currently floating in the Pacific Ocean is much larger than what scientists estimated, and if we do not change our behaviour there will be more plastic than fish by 2050.

The constant use of processes and materials that are not designed within a natural life cycle.

USA generates about 254 million tons of waste, with a 34,3% recycling rate. Globally, only 9% of urban waste is recycled.



## OUR VISION

Oka produces biopackaging with a clean renewable production system and non toxic raw organic material. Through thermoforming, various products are generated.

Different shapes, same safe compostable ingredients. When discarded, the products return to nature causing no waste nor damage to Nature. In fact, they generate a positive impact by feeding the soil and supporting a new life cycle to start.





## RAW MATERIAL

Cassava is our biomass basis.

Different dyes, seeds and fibres can be added to it generating different aesthetic results and applications.

Cassava is a low cost material, abundant in every tropical area of the planet.

It is an undemanding crop both in terms of input and technologies.

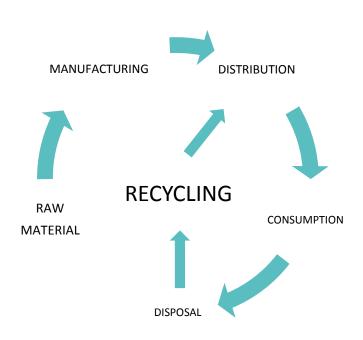


Accessibility – Sustainability - Positive Impact - Closed Loop -Zero Trash



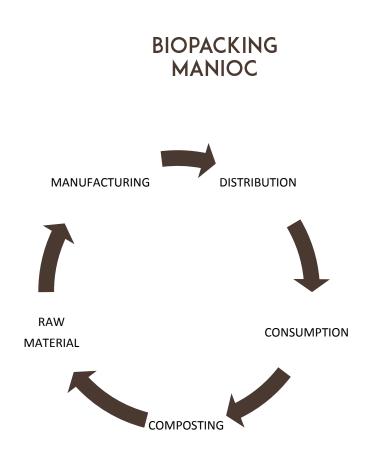
# WHY ARE OUR CURRENT SOLUTIONS AS A PLANET, UNSUITABLE?

PLASTIC.
CARDBOARD OR
STYROFOAM



« Waste is a design error »







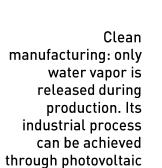
### RENEWABLE RAW MATERIAL

The basis of our biomass is manioc starch, which can be enriched with natural fibers and dyes



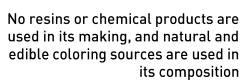
Residues can be disposed of in any biome, since it's biocompatible and decomposes rapidly in water or soil

### CLEAN MANUFACTURING





energy





#### **COMPOSTABLE**

Our biopackages nourish life on Earth, and the earth itself.



#### **ECOLOGICAL/EDIBLE**

We use Biomimetics as the source of our creative process in coming up with solutions for our products, materials and processes

#### **ECODESIGN**



### MEET OKA



#### 1) CIRCULARITY (5/5)

Biodegradable material - Renewable sources - Product resistance enhanced and cost lowered with fibers addition in the biomass - Compostable - Avoid plastic and bioplastic use and nature contamination.

#### 2) SOCIAL IMPACT (4/5)

We work with local materials and workers, offering our team a quality training, generating employments and income, as well as environmental responsibility.

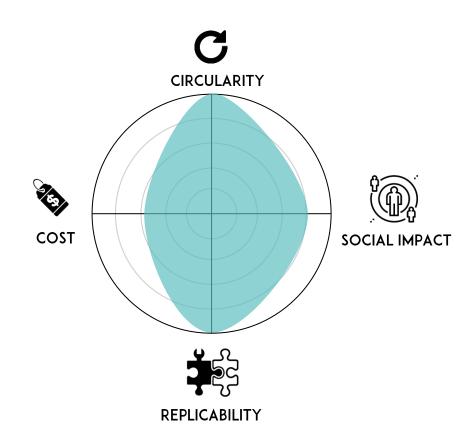
#### 3) REPRODUCIBILITY (4/5)

Patented Product and Process, enabling it reproduction anywhere in the World. Safe industrial automated process.

Modular equipment, designed both for a low or a high scale production.

#### 4) COSTS - ECONOMIC SOLIDITY (3/5)

low cost inputs no reverse logistics needed.





### OUR SOLUTION: VALUE PROPOSITION

#### **VALUE PROPOSITION**

#### **OUR PRODUCTS**

Oka offers compostable bio packages that are 100% biodegradable, based on manioc

It proposes the substitution of plastic. Styrofoam or molded pulp packages into thoroughly compostable ones.

It offers a variety of templates for egg packaging of 3, 6 and 10 eggs

Delivery trays, cups, bowls, plates, spoons and cases for the food line

Boxes, technical benches, angles and cases for cosmetics, electronics, toys, fashion and accessories, gifts, etc ...

A creative and closed loop alternative.

Generation of a positive and regenerative impact. Support of traditional communities, maintaining people on their native land. National raw material and technology.

> Constant innovation. biomimetic design, clean production.

#### SOLUTION

Protection of the planet and the oceans.

Zero waste during industrial processing.

Nicely finished and resistant packages. Total hygiene and zero toxicity.

Clear information of origin, production and composition of the materials.

The constant search for alternatives The cultivation of a healthier planet for our children.
for our chil Freen or Ecological brances and products and products and pring status to whoever uses and products are producted by the products and products and products are producted by the products and products are producted by the products and products are producted by the products are producted by the products and products are producted by the product and product and product are producted by the product and product and product and product are producted by the product and product and product are producted by the product and producted by the product and producted by the product are producted by the product are producted by the pro

Technical: cosmetics, fashion, accessories, electronic devices. giveaways, toys, jewelry, protective

wedges for Household **Appliances** and other.

#### **CURRENT GLOBAL HARMS**

The negative impact of package disposal in the planet and seas.

Pollution during the industrial process and the inadequate sourcing of raw material. Package waste.

Low quality packages.

Lack of hygiene, toxicity.

Misleading information on the quality and impact of packaging currently on the market.

#### **USAGE**

Food sector: fast foods, delivery, fruit, legumes, vegetables and egg packaging.



## BRAND PRODUCTS





## TAKE AWAYS LINE









## **NEW RELEASES**







## NEW RELEASES



Our products sum social and environmental value.



## DETAILS





\* Has side locks

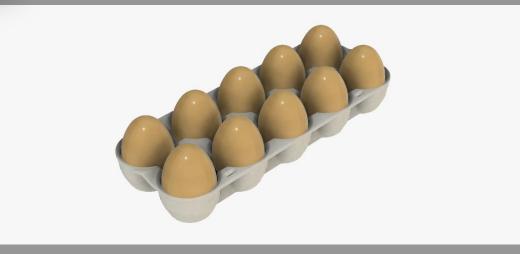
\* Easy lock and egg's removal.

\* Clean and functional design

\* Resistant, insulating and impact-absorbing material

\* Ergonomic product









### TAILOR MADE SOLUTIONS









Same base. Different outcomes. Explore the many possibilities of material customization, brand logo appliances and shapes. Have a package solution tailor made for you.









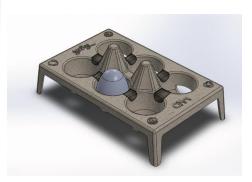
















# TECHNICAL PACKAGING















Different results with the same template due to the many possibilities for customization of the material and use of the brand logo













# WHY ARE OUR CURRENT SOLUTIONS AS A PLANET, UNSUITABLE?

#### Biopacking compared to other used products

	FEEDSTOCK	CO2 EMISSION	DECOMPOSITION TIME	COMPRESSION RESISTANCE	RESISTANCE TO MOISTURE	MATERIAL FLEXIBILITY	RESISTANCE TO TEMPERATURE	NON TOXIC AND OVEN SAFE
PLASTICS	FOSSIL	MIDDLE	+ de 450 YEARS	LOW	HIGH	HIGH	LOW	BIOCOMPATIBLE  100% BIODEGRADABLE  ACOUSTIC AND THERMAL
EPS	FOSSIL	MIDDLE	UNLIMITED	MIDDLE	HIGH	MIDDLE	LOW	INSULATION ANTI-IMPACT
MOLDED PULP	RENEWABLE (monoculture)	HIGH	6 MONTHS	MIDDLE	LOW	MIDDLE	MIDDLE	UV RAY PROTECTION  FIT FOR ANIMAL FEED  AFTER USE
OKA	RENEWABLE	ZERO	30 DAYS	HIGH	LOW	MIDDLE	HIGH	BUSINESS MODELS



### **TEAM**



ÉRIKA CEZARINI
DESIGN



NATALIA DEL GAUDIO



FELIPE ROCHA
COMEX



EDUARDO MARTIN



FERNANDO MARTINS



OLIVIA YASSUDO
BUSINESS STRATEGY

