



**Polimex**

**BIOPLÁSTICOS**

Plastics of the future, inspired by nature.

## Bio-Inspiration

“Nature’s packaging is compostable. Why should ours be any different?”



Source: PureWow

**8.3 Billions  
of tons**

**9% Recycled**

**11% Incinerated**

**80% Accumulated  
in the Nature**



BUSINESS

## Unilever Vows To Reduce Plastic Packaging Use By 2025

October 7, 2019 - 4:03 PM ET

PAOLO ZIALCITA



News

Coca-Cola in Western Europe transitions to 100% recycled plastic (rPET) bottles in two more markets *Coca-Cola*

## DAVOS 2020

### Nestlé is spending billions to create a market for recycled plastics

By [Hanna Ziady](#), [CNN Business](#)

Updated 1754 GMT (0154 HKT) January 17, 2020



### P&G Fabric Care makes plastics reduction commitment

If successful, the reduction in plastic packaging by P&G Fabric Care in Europe by 2025 will be equivalent to one line of detergent bottles around the earth.

Author — [Anne Marie Mohan](#)

Apr 25th, 2019



# Polimex

BIOPLÁSTICOS

## Value Proposition

“Replace plastics that are harmful to the environment, providing environmental education and being the change we want to the planet.”

### Products:

**100% Biodegradable**

**100% Renewable**

**Fully Sustainable**





# **Plástico Natural Biodegradável**

**Natural Biodegradable Plastic**

- **Agro-industrial waste as raw material.**
- **Replacement for PE (polyethylene) and PP (polypropylene), petroleum plastics, 55% of the market; and also PS (polystyrene)**
- **Applied to packaging and consumer goods**





# Competitive advantages of PNB

**Registered technologies developed by Polimex**

**Use agricultural waste as raw material**

**100% renewable (no use petroleum sources) and biodegradable**

**Can be used as fertilizer after natural / home composting**

**Circular economy integrated**

**Reduces carbon footprint in companies and solid waste**

**PNB can be used in the same line of production of traditional plastics**

# Products

 **NB - IPF**



 **NB - FI**



# Industrial Production with clients

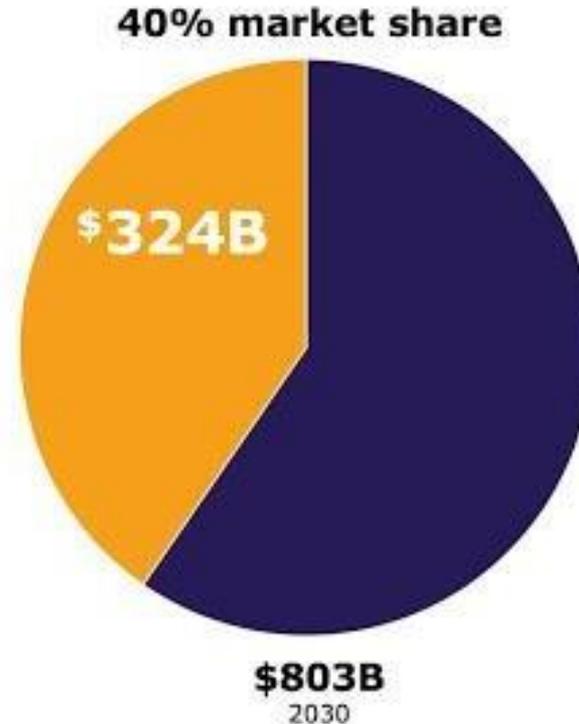
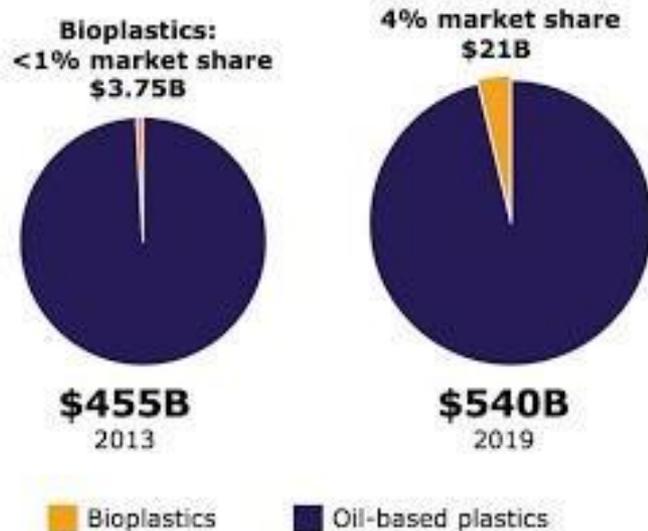
## Injection molding and extrusion



# Global Plastics Market

## GLOBAL PLASTICS MARKET

- Bioplastic market expected to grow at **30% CAGR 2013-2030**
- Traditional plastics expected to grow 3% annually



Source: Grand View Research 2014, European Bioplastics 2013, BCC Research 2014, Nexant Inc. 2012

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# Competitors

	Country	Product type	100% Biodegradable	100% Renewable	Highlights
 <p><b>Polimex</b> BIOPLÁSTICOS</p>		<b>Biocomposites (Agro residues)</b>			<b>agro waste as raw material, wide scalability, natural/home composting, vast applications over competitors</b>
 <p><b>BASF</b> We create chemistry</p>		<b>Ecovio e Ecoflex Petrochemicals resins and additives mixture</b>			<b>Non-biodegradable product, only industrial composting</b>
 <p><b>BIOME</b> BIOPLASTICS</p>		<b>Petrochemicals resins and additives mixture</b>			<b>Petrochemicals mixture, non-renewable</b>
 <p><b>I'm green</b></p>		<b>Non-biodegradable and recycled plastics mixture</b>			<b>Partially renewable, non-biodegradable 51% Bio-PE e 49% recycled</b>
 <p><b>eco one</b><sup>®</sup></p>		<b>Oxy-biodegradable additive</b>			<b>Non-biodegradable plastics, microplastics generation</b>

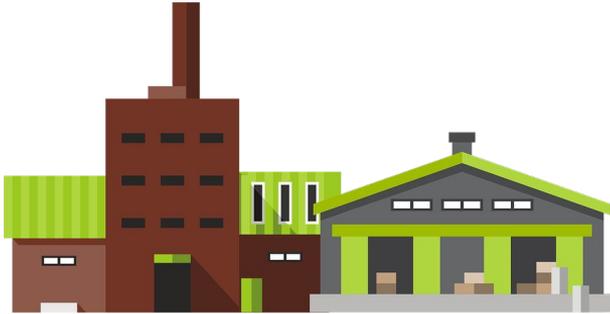
# BUSINESS MODEL

## B2B

(direct sale of resin to plastic manufacturers)

## Based on R,D&I

(Technological service)



## Outsourced production

## 4 deposited patents

Polimex products | Deposit date

BR 10 2019 014296 0 | 07/2019

BR 10 2019 014288 0 | 07/2019

BR 10 2019 021120 2 | 07/2019

BR 10 2021 022353 7 | 11/2021

Average time to approval = 5,8 years

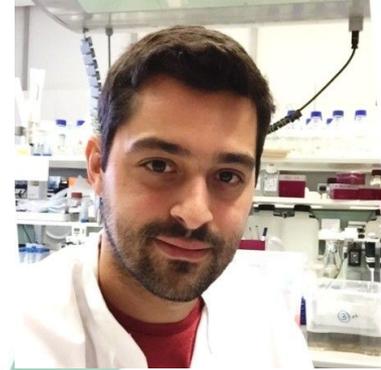
# Partnership DKFZ-Polimex

**dkfz.**

**GERMAN  
CANCER RESEARCH CENTER  
IN THE HELMHOLTZ ASSOCIATION**



**Prof. Dr. Frank Lyko**  
Head Epigenetics Division



**Dr. Vitor Coutinho**  
Epigenetics Division / A130

**Technological service contract signed**  
**Laboratorial steps performed at IFRJ**  
**€ 24.680,00 (Revenue generated)**  
**€ 30.000,00 (Next project)**

# Clients in negotiation



CERVEJARIA  
**ambev**



**Fibrasa**  
EVOLUINDO E TRANSFORMANDO

**Aj**  
AJINOMOTO

  
Carrefour

*Strawplast*  
DESCARTÁVEIS

  
OAK  
BERRY

 VALFILM

**ifood**

 oBoticário

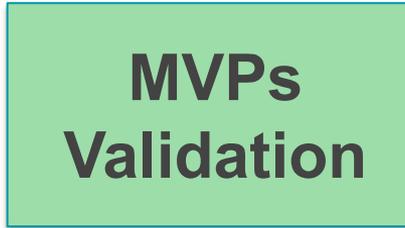
L'ORÉAL  
BRASIL

 **plastlab**

# Road Map 2019/2022



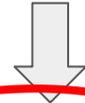
13/05/2019 à  
01/12/2020



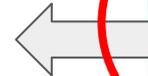
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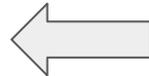
08/2021



10/2022



11/2022



2023



# Directors



**Domingos Jafelice**

**Senior Executive Director (CEO Senior)**

Graduated in Chemical Engineering (USP)

Msc in Materials Engineering (Mackenzie)

Ex-Executive in DSM South America,  
UNIPAC, Nitriflex

Comercial Strategies specialist in Chemical  
and Plastic sector



**Paulo Henrique Cardoso**

**Executive Director (CEO)**

PhD in Materials Engineering and Science  
(UFRJ)

Graduated in Chemistry and Chemical  
Processes

Shell LiveWire Global Program

# Directors



**Luan Campos (Co-Founder)**  
**Research and Innovation Director (CTO)**  
Graduated in Chemical Processes  
Post-graduate in polymer science  
Specialist in biodegradable plastics  
Former researcher of CETEM and CBPF  
(Federal Research Institutes)



**Lucas Corrêa Batista (Co-Founder)**  
**Industrial-Process Director (CPO)**  
Graduated in Chemical Processes  
Post-graduate in polymer  
science  
Specialist in plastic industry  
processes  
Researcher ISI Biossintéticos &  
Fibras Senai-Cetiqt

# CONTRIBUTORS



**Gabriel Lysias**  
**Commercial Manager**  
Graduate in  
Biotechnology  
MBA in business



**Luan Jorge**  
**Graphic designer**  
Environmental  
Technician



**Jullyanne Mendonça**  
**Social media manager**  
Graduate in Chemical  
Processes

# Why invest in **Polimex Bioplastics**?

- ❖ **Bioplastics market is growing at a 30% annual rate** while traditional plastics at a 3% annual rate. Bioplastics expected to reach **40% of the plastic market by 2030.**
- ❖ **PNB produced using brazilian agroindustrial waste;**
- ❖ **Product 100% renewable and 100% biodegradable.**
- ❖ **Natural / home composting environment.**
- ❖ **End product can be used as fertilizer through circular economy.**
- ❖ **Reduces carbon footprint.**
- ❖ **New products being developed** such as plastic being produced from sewage sludge.



# Supporters





**Thank You!**



***Paulo Henrique Cardoso***



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