

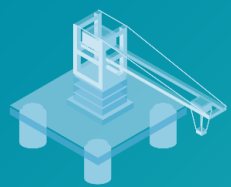
The background of the slide is an aerial photograph of a coastline. The left side shows a dense green forest, and the right side shows clear, turquoise water. Overlaid on this image are several large, teal-colored geometric shapes: a semi-circle on the far left, a vertical bar, a diagonal bar, and a large arrow shape pointing to the right that frames the central text.

**THE IDEAL  
PLATFORM FOR  
SUSTAINABLE  
ENTREPRENEURSHIP**



# OUR BUSINESS

We provide chemistry and plastics resins to your daily life in various products, helping you live a better life.



**EXTRACTION**  
FEEDSTOCKS

NAPHTHA / GAS / ETHANOL / SALT



**1st GENERATION**  
BASIC PETROCHEMICALS

ETHYLENE / PROPYLENE / CHLORINE / CAUSTIC SODA



**2nd GENERATION**  
THERMOPLASTIC RESINS

PE / PP / PVC



**3rd GENERATION**  
PLASTIC CONVERTERS

Braskem  
OPERATING  
FOOTPRINT

## HEALTH

Applications aimed at **hospital safety** and support professionals to take care of your health.



## FOOD

Products that **help agribusiness productivity** and ensure food preservation until it reaches your table, while reducing waste.



## TRANSPORTATION

Materials that enable **efficiency and better vehicle performance**, providing safer and more sustainable experiences.





# Braskem



# A GLOBAL COMPANY

Leading global player in Thermoplastic Resins (PE+PP+PVC) production

**40**

INDUSTRIAL  
UNITS

**71**

CLIENTS IN MORE THAN 70  
COUNTRIES

**8,353**

TEAM MEMBERS  
IN FEB/2022

**5.6**  
BILLION

EBITDA 2021  
IN US DOLLARS

**15.4**  
MILLION

PRODUCTION OF APPROXIMATELY  
**TONS IN 2021**  
Or 34 MM LBS

**2.0**  
BILLION

FREE CASH FLOW GENERATION  
2021  
IN US DOLLARS

**NORTH AMERICA**



**9 3 3**

**EUROPE**



**2 1 1**

**SOUTH AMERICA**



**29 8 4**

**ASIA**



**2**



INDUSTRIAL  
UNITS



OFFICES



INNOVATION  
CENTERS /  
BIOTECH LAB





**Bloomberg**

CLIMA EXAME **Diversidade** ETHOS

### INCREASINGLY DIVERSE AND INCLUSIVE

Develops actions and guarantees work free from prejudice and discrimination against the environment



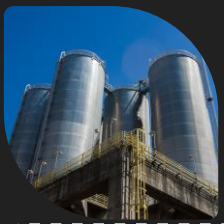
### CLIENT FOCUSED

Commercial strategy focused on partnership and proximity with clients



### ROBUST FINANCIAL STRATEGY

Strong liquidity position, with most debt maturing in the long term and consistent operating cash generation



### FUTURE ORIENTED COMPANY

implementation of digital initiatives, with the goal of transforming our core business and also creating new business models



# DIFFERENTIATORS



### CONCRETE CONTRIBUTIONS TO SUSTAINABLE DEVELOPMENT

Committed to the Carbon Neutral Circular Economy and ESG fundamentals



### INNOVATIVE

Recognized by MIT as one of Brazil's most innovative companies

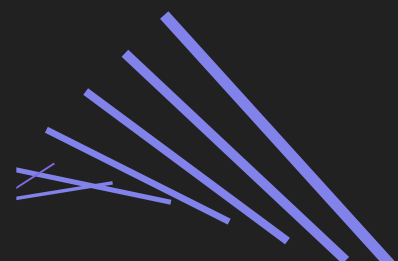


Índice Carbono Eficiente **IC02**

Global Compact **LEAD**

**CDP** A LIST 2020

**ROBECOSAM** We are Sustainability Investing



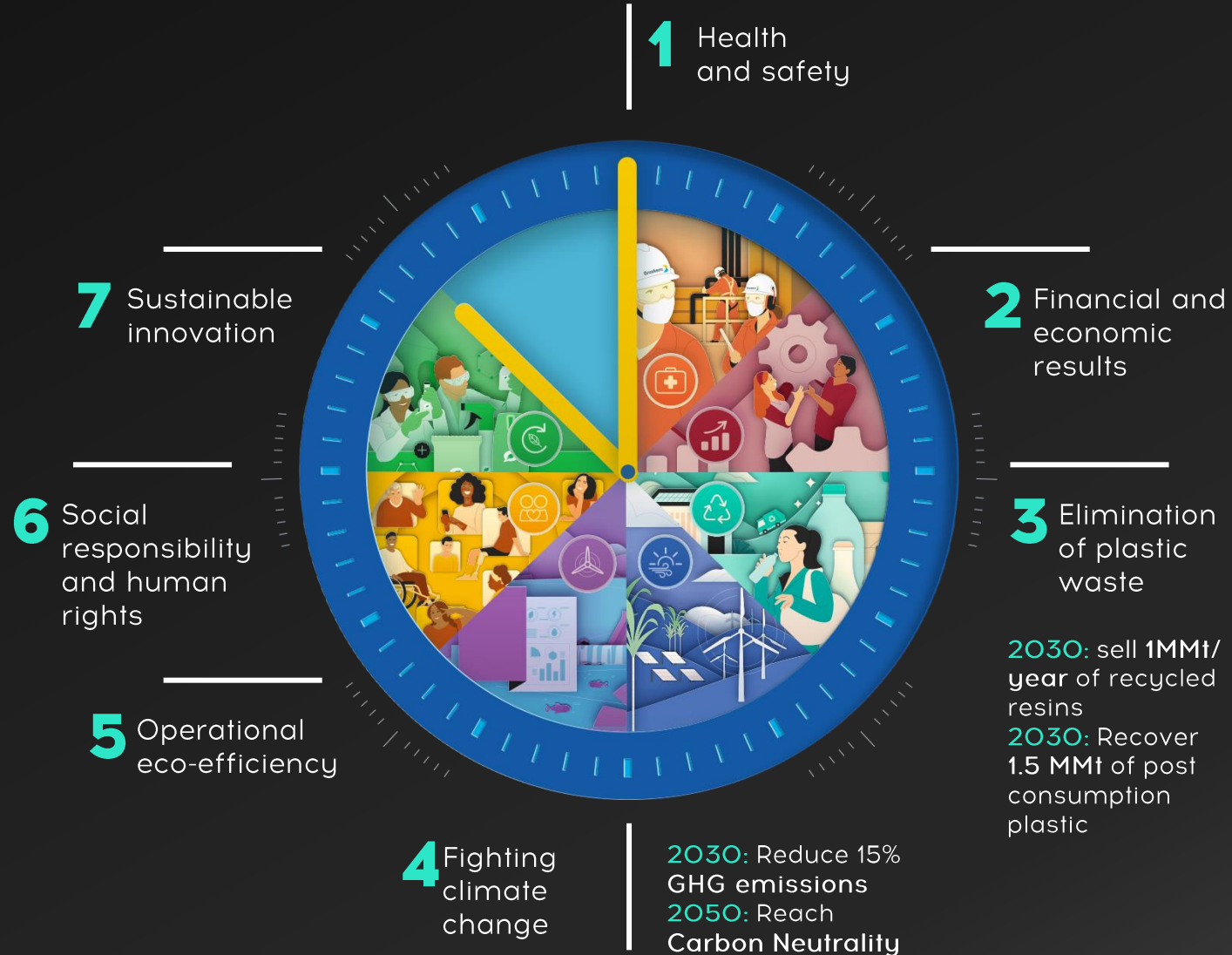


# OUR COMMITMENTS TO SUSTAINABLE DEVELOPMENT

Braskem, in alignment with the UN 2030 Sustainable Development Goals, has made new commitments to people and the planet. Engaged in seven different dimensions, targeting the Carbon Neutral Circular Economy, we aim to **expand positive impacts and mitigate risks** in Braskem's operations, creating value for the business based on innovation and sustainability.

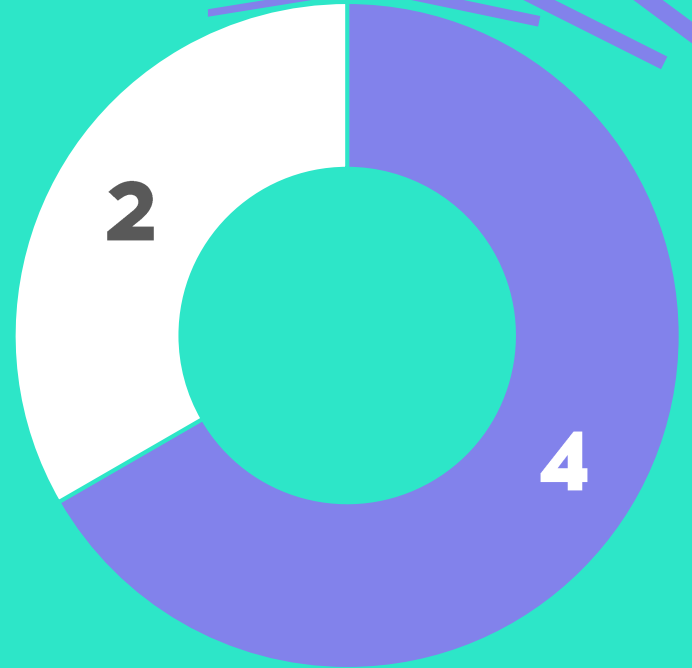
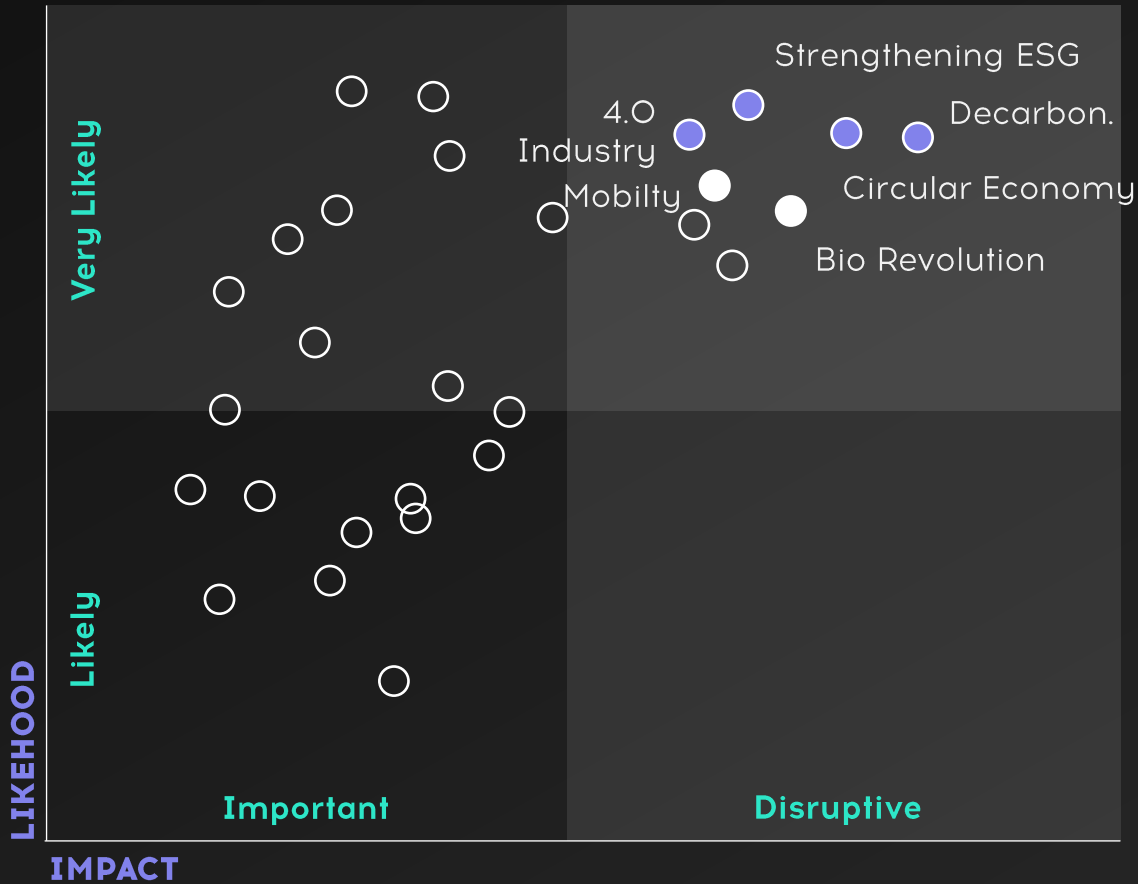


LEARN MORE



# INNOVATION TRENDS TO CHEMICAL INDUSTRY

Over the evaluated **mega trends**, 06 were considered more **likely to disrupt** the chemical industry and were prioritized on **Braskem's Innovation Strategy**



## Digital Transformation

- 4.0 Industry
- Mobility

## Sustainability

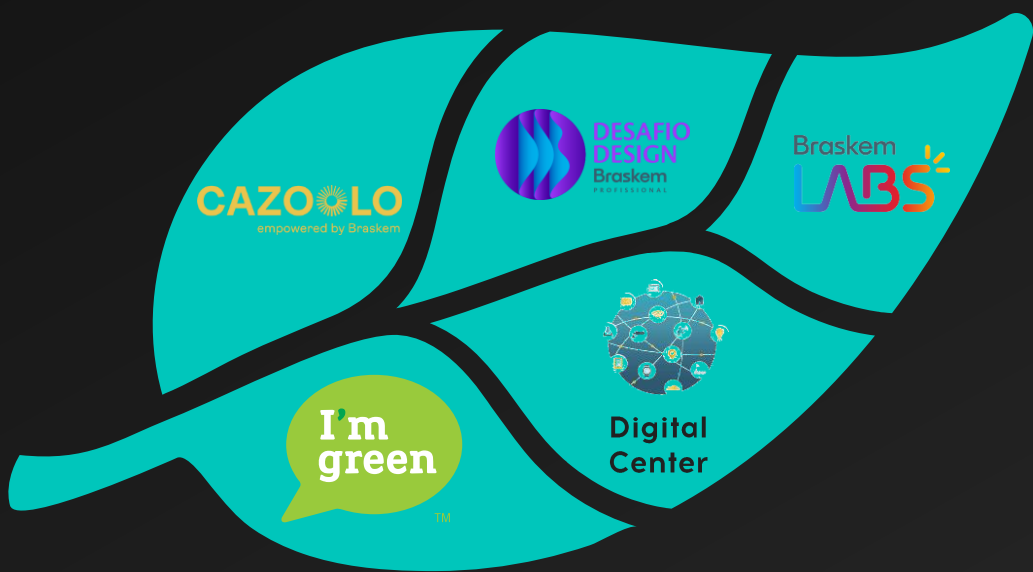
- Decarbonization
- Circular Transition
- Strengthening ESG
- Bio Revolution

- Mid Term (3-5 Years)
- Long Term (>5 Years)



# OUR WAY OF INNOVATING

Focus on innovative solutions, products and processes is key to consolidating businesses and guiding our efforts in building a forward-looking chemical and petrochemicals sector. That is why we constantly invest in people, research, infrastructure and strategic partnerships.



# BRASKEM IN NUMBERS

7

Pilot plants

402

Participants in Innovation and Technology

USD 65,78MM

Investments in Innovation in 2021

411

Patents granted

+300

Clients supported by Innovation and Technology in 2021

2

Innovation and Technology Centers



2

Polymer technology Centers



1

Process Technology Development Center



2

Biotechnology Centers



5 R&D Platforms



Biomass to chemicals



Next generation processes



CO2 to chemicals



Material Substitution



Recycling



# BUSINESS HIGHLIGHTS



I'm  
green

TM

Green Polyethylene (or simply Green PE) is a 100% Brazilian-made, renewable and sustainable product that is a result of **Braskem's innovation and technology**

Green PE is made from sugarcane ethanol and helps to reduce the greenhouse gases in the air

**DROP-IN SOLUTION:** substitutes conventional polyethylene using existing facilities around the world

LEARN MORE



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Made from

**SUGAR-CANE**

100% RENEWABLE



# SUSTAINABLE INNOVATION

## IS A NEW START FOR ALL

The existing technology won't solve the industry challenges regarding carbon neutrality and plastic circularity. Partnering with the ecosystem can speed up the process to generate disruptive innovation.

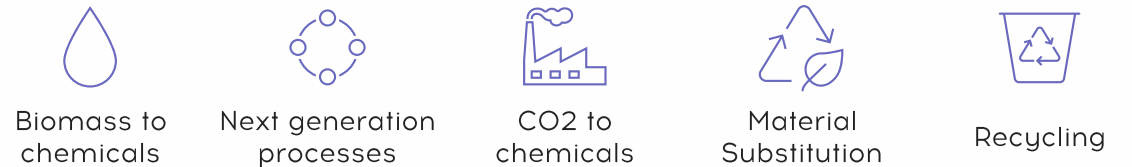
### TECHNOLOGY SCOUTING

PARTNER	ACTION
	Deal flow session process to filter and introduce startups for corps
	SPRINT - open program to seek for innovative solutions (PoC)
	Market & Technology and developers, landscape & Tech. deep-dive & prioritization
	Tech scouting, deep-dive & prioritization
	Photochemical conversion of CO2 to chemicals: Market assessment, investment, tech. deep-dive & prioritization

## PARTNERING TO LEVERAGE EXTERNAL TECHNOLOGY

In 2021 we've engaged with more than 35 startups to support the O5 I&T Platforms

### Platform



### Startups



### Consortium





Braskem ecosystem to represent products, technologies and initiatives that are helping to **boost the circular economy**



Study for joint investment to build a new **green ethylene facility in Thailand**



Renewable energy supply for 20 years, avoiding the emission of **700,000 tons of CO<sub>2</sub>**



# IMPACTFUL PARTNERSHIPS



Global licensing of **commercial green ethylene technology**, which will accelerate development of chemicals and plastics made from bioethanol



EDC Demo Plant based on **breakthrough Chemical production technology** with energy and CO<sub>2</sub> reduction



Joint venture to **produce and market the green MEG technology** developed by Haldor Topsoe



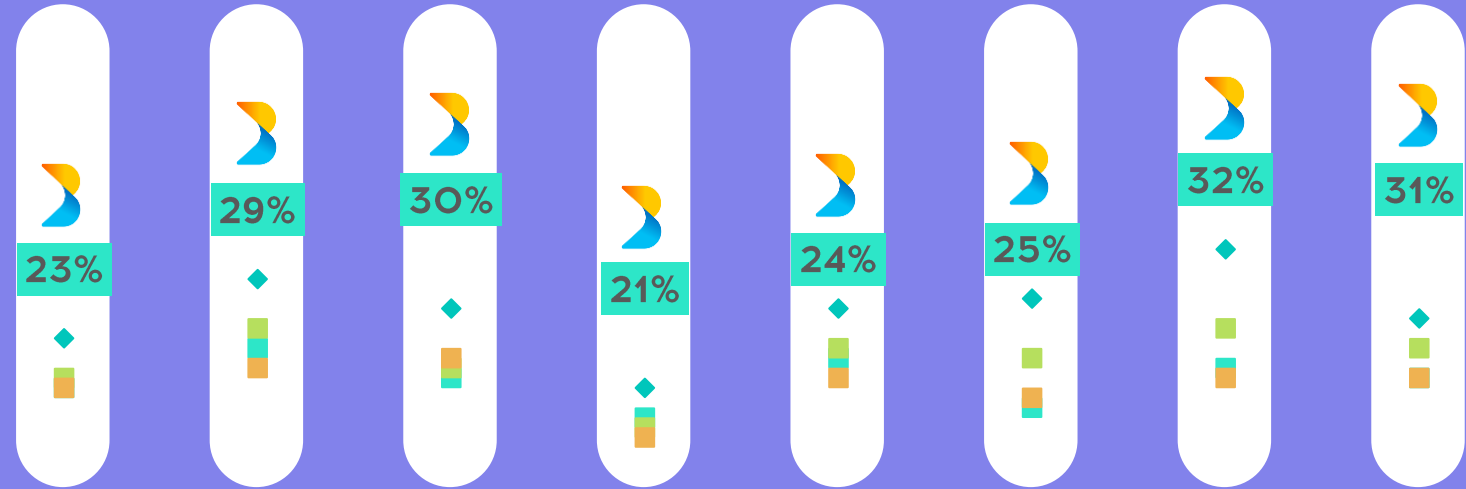
# SUSTAINABLE INNOVATION



## Perception

Braskem's sustainable innovation initiatives are perceived by Brazilian society and clients abroad.

### Attributes Perception Within Companies | Society Brazil



Sustainable Operation    Contribution for Society    Recycling Technology Focus    Carbon Neutrality Commitment    Sustainable Solutions    Innovative Products    Future Oriented    Innovative Company

Braskem    Peer 1    Peer 2    Peer 3    Peer 4

Source: Ipsos

## Braskem Innovation Perception from Clients

More Frequent Words

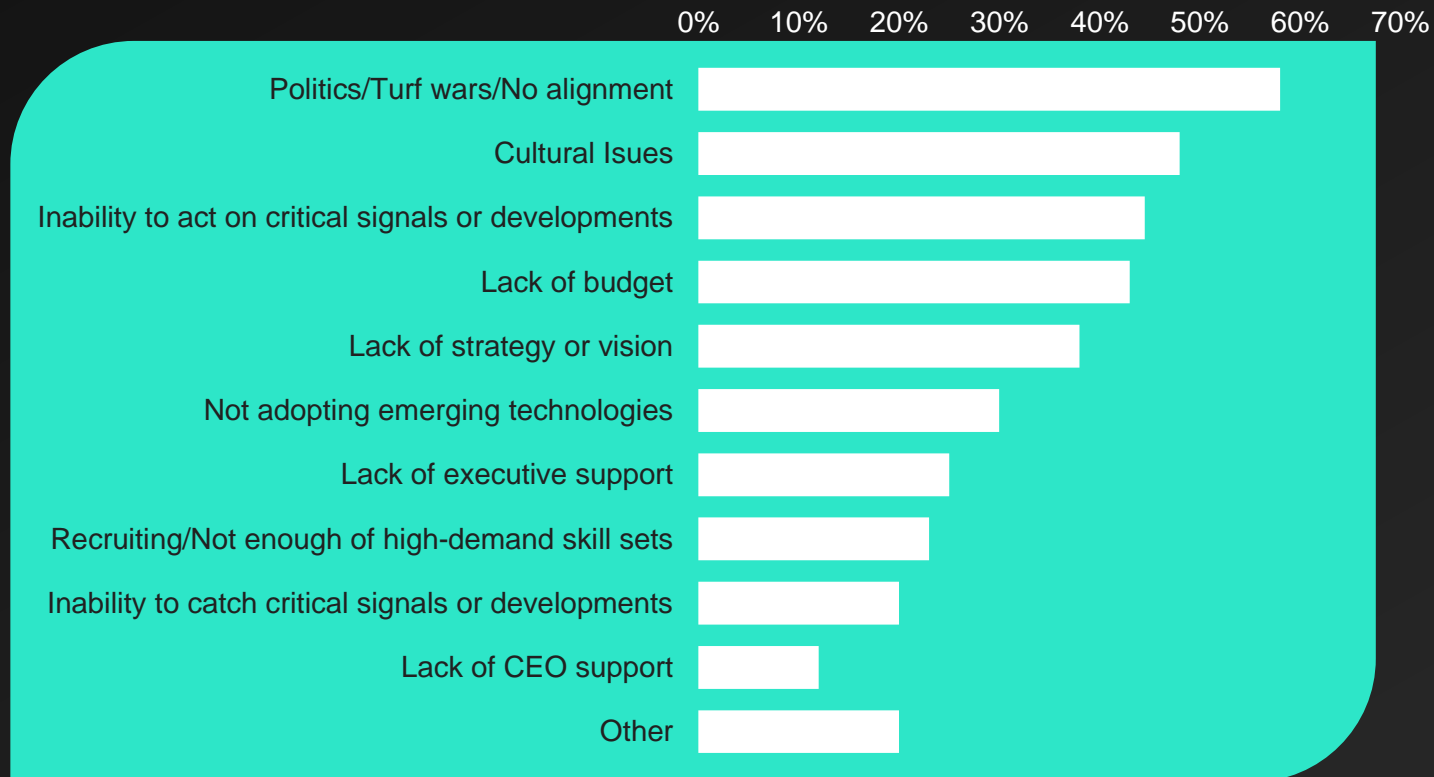


Source: RepTrak

# BIGGEST OBSTACLES TO INNOVATE

*In large companies*

As other big corporates, Braskem have opportunities to speed up the Innovation Process, adjusting structure, governance and processes to a lean and agile model that meets entrepreneurial needs



## Bylaws

Allowance for commercialization



## Compliance

Compliance requirements for partners don't meet alternative business models



## Procurement

High SoD Level



## Systems

Difficulties to incorporate new processes and products



## People

Attract entrepreneurial profile through adequate incentives for risk-taking



## Decision Process

Define specific processes for analyzing startups and approve investments



# AN INDEPENDENT VEHICLE BUILT TO SUIT INNOVATION NEEDS

Oxygea is a hub for startups powered by Braskem, that will provide to new businesses capital investment and an adequate platform to boost innovation.



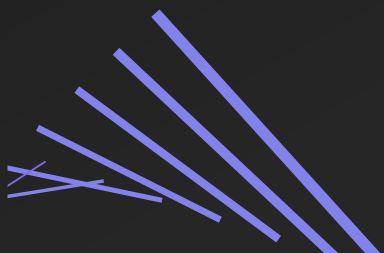
- Adoption of **systems, processes and internal policies** to meet entrepreneurial model
- Autonomy
  - Independence
  - Simplified Governance
  - Faster Decision-Making Process
  - Innovation Culture

## Venture Builder

**Inside-Out / Coupled**  
Support structure for Venture-Growth, offering dedicated processes and governance.

## CVC

**Outside-In**  
Corporate Fund that enables investment in startups and partnership development.





# INCREASING THE CONNECTIVITY BETWEEN STARTUPS AND BRASKEM



## STARTUPS

Investment  
(Smart Money)



Support Services  
(HR, Backoffice,  
Legal, IP)



Access to innovation  
and Technology  
Capabilities



Mentoring /  
Acceleration



Connectivity with  
Braskem's ecosystem  
to speed up  
development



Foster  
Entrepreneurship



Strengthen synergies  
between Braskem  
and Startups



Develop innovation  
capabilities



Offer suitable  
processes for  
emerging companies



Create a structure  
that mitigates risks  
to Braskem

# FIELDS *of* INVESTMENT



The investment thesis of this new entity contemplates innovative solutions for Braskem's **sustainability challenges** and **digital transformation**



## CIRCULAR ECONOMY

- Chemical/dissolution/mechanical recycling, plastic waste-based products, new plastic replacements
- Reverse logistics



## CARBON NEUTRALITY

- Carbon capture, storage, utilization & other carbon market technologies



## ADVANCED BIO-CHEMICALS & MATERIALS

- Biodegradable polymers, bio-based monomers
- Lightweight applications / composites, monomaterial packaging



## FINTECH IN CIRCULAR ECONOMY & CLIMATE CHANGE

- Fintech applications in carbon/plastic markets
- Marketplaces



## COMPUTING IN MANUFACTURING

- AI/ML/Quantum computing applications & use cases in manufacturing



## BIOTECHNOLOGY & NANOTECHNOLOGY

- Biotechnology in chemicals/plastics/materials
- Nanotechnology in manufacturing

# PORTFOLIO COMPANIES



## PRINTING THE FUTURE

Production and sale of filament for 3D printers using Braskem's conventional / bio - polymer and PCR technology to provide sustainable efficient solutions

## FREIGHT EFFICIENCY AND CONTROL

Freight management system with reverse auction functionality for shippers

## 4.0 REVOLUTION TO PLASTIC INDUSTRY

Production process optimization for plastic industry transformers through Machine Learning

## DEMOCRATIZING SUSTAINABILITY KNOWLEDGE

Sustainability standard for companies and consumers to compare the environmental impact of different products along its lifecycle





**THE BEST WAY TO BE PREPARED FOR  
THE FUTURE IS BEING PART OF IT**

Join us and be part of the ecosystem  
that will anticipate the future.

