Arlington, February 23, 2018

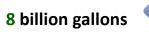


USDA's 94th Annual Agriculultural Outlook Forum

Brazilian Sugarcane Sector: Recent Developments and the Path Ahead

> Leticia Phillips Representative - North America

- The Brazilian Sugarcane Industry Association (UNICA) is the leading sugarcane industry association in Brazil. Its more than 120 member companies, voluntarily engaged, represent over 50% of the ethanol and 60% of the sugar produced in Brazil.
- Representing the sector with public entities in Brazil and abroad, establishing a constructive dialogue with stakeholders, monitoring (and influencing) legislation related to biofuels, sugar and bioelectricity, promoting the Brazilian ethanol image as a clean and renewable and sustainable energy abroad.
- + It has offices in four locations: São Paulo (headquarters), Brasília, Washington DC and Brussels



2<sup>nd</sup> world largest producer: 25% of production and 20% of world exports



4% of Brazilian electricity consumption

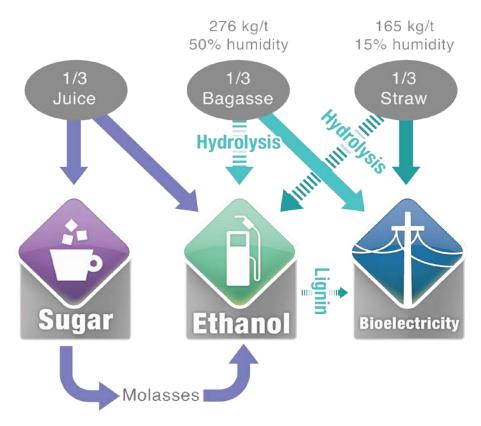


Largest producer and exporter in the world: 20% of global production and more than 40% of exports



## Breakdown of Sugarcane's Energy

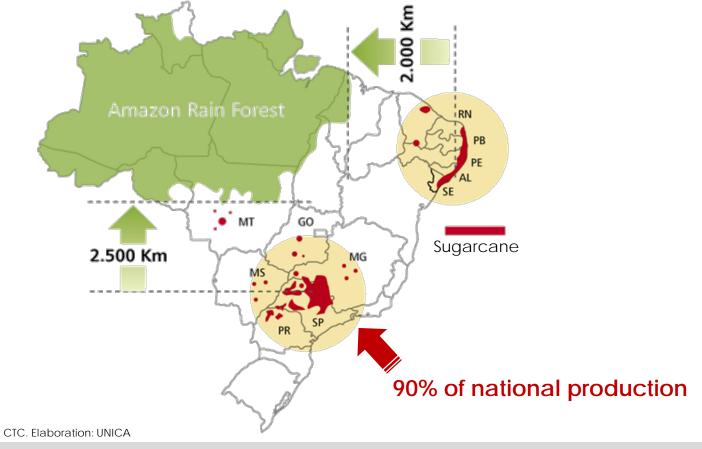




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Source: UNICA

## Sugarcane in Brazil



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Source: NIPE-Unicamp, IBGE and CTC. Elaboration: UNICA



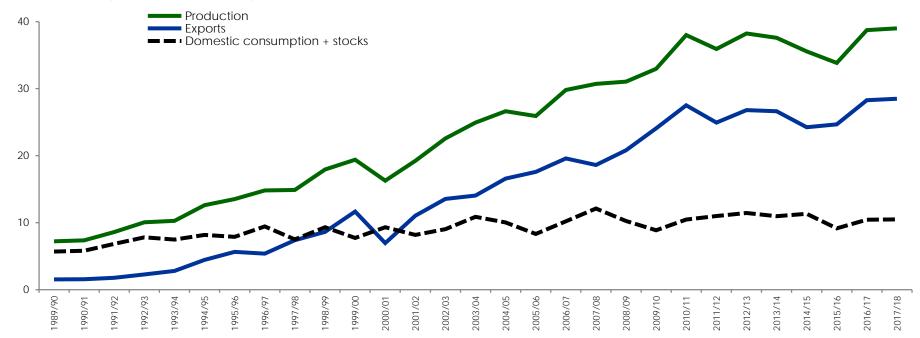
## The Brazilian Sugar Market:

An overview



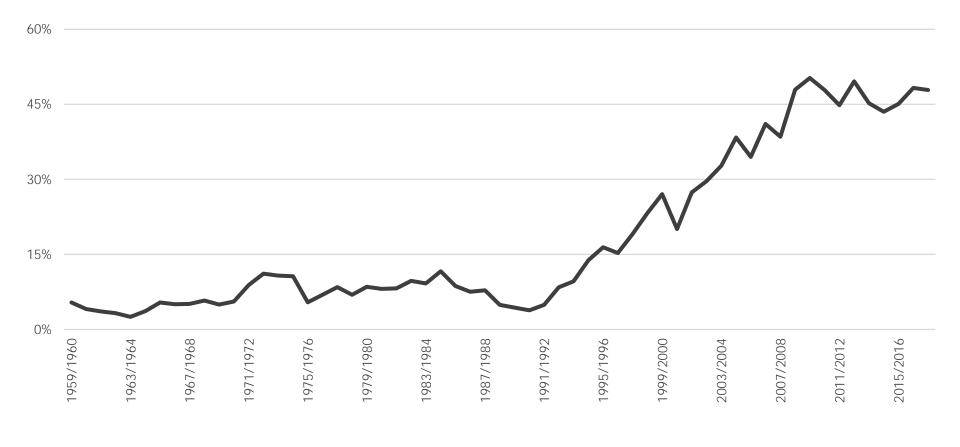
## Evolution of the Brazilian sugar market

Production, exports and consumption (million tonnes)



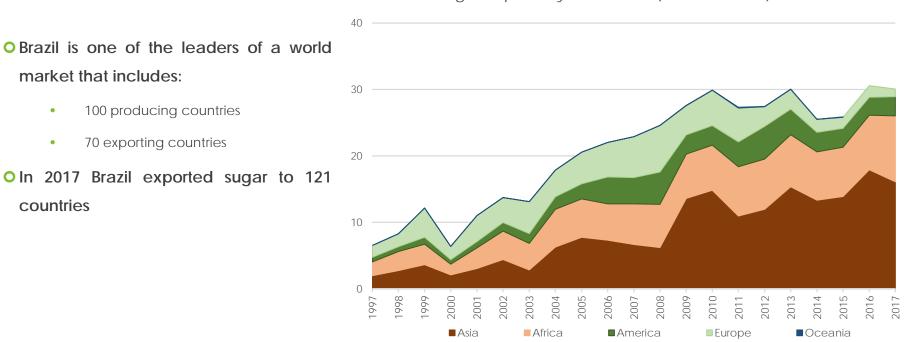
Source: UNICA, MAPA and Brazilian Foreign Trade secretariat (SECEX). Note: \* geometric growth rate

## Brazilian market-share in the world market





### Brazilian participation into the world market



Brazilian sugar exports by continents (million tonnes)

Source: LMC. Note: e - estimative; p-preliminary.

### OStigmatization of sugar consumption

Why sugar is bad for you

# The New York Times

What Not to Eat: 'The Case Against Sugar'

Daily Sabah > Life > Heal

Sugar harmful for mental health, researchers say

The bittersweet story of sugar

DAILY SABAH HEALTH

Brasileiros consomem 50% a mais açúcar do que deveriam, diz OMS

O estudo e concluiu que brasileiro exagera no consumo de açúcar. OMS recomenda consumo máximo de 50 gramas de açúcar por dia.

## theguardian

Too much sugar could increase depression risk in men, study suggests

And why its dangers are still being ignored in too many countries The Economist – 2016

OProtectionist and distortive sugar policies across the globe

OThailand, India, China, United States and European Union

### unic⁄i

## Challenges: Trade Issues

- ✦As of January 15th, 2018 the Thai government adopted a new regime, as a result of a challenge by Brazil. Brazilian government is analyzing the changes to ensure that it is compliant with WTO rules
- ✦Brazil will defend its interest with respect to the safeguard measures promoted by China - Brazil represented 60% of Chinese imports, Brazil the most affected country.
- Continuous monitoring of potentially distortive public policies, by sugar producing countries.
  - ✦Brazil's sugar quota in the US is smaller than DR's
  - ✦Quota established based on trade flows in the 80s
  - +US sugar TRQ represents 0.5% of BR exports





## The Brazilian Ethanol Market:

An overview



#### Brazilian ethanol production (billion liters)



**GOVERNMENT-DRIVEN** 

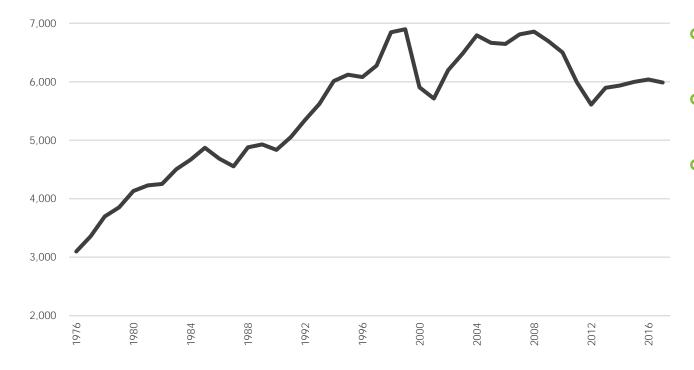
MARKET-DRIVEN

Elaborated by UNICA with data from MAPA and UNICA



### Expansion based on efficiency and productivity GAINS

Historical productivity data in Brazil (liters of hydrous ethanol per hectare - moving average)



In this period, ethanol yields more than double
Up to the 2000's, productivity raised on average 3.5% p.y.

• Productivity gains were even more significant depending on the region

With the **RIGHT INCENTIVES**, from both public policies and from the market, the sugarcane sector responded **POSITIVELY** and **TIMELY** Flex Fuel technology Federal tax differential between fossil and renewable fuels Reduction of VAT over hydrous ethanol Rising oil prices Competitive production costs Global interest on biofuels and emission reduction alternatives



## What lays ahead?



- UNICA still analyzing data to do a forecast
- Harvest update will be published in April, coinciding with the beginning of our harvest
- What we know so far?
  - Harvest will favor ethanol production
  - Sugar production will likely decrease



## Recent Policy Changes



## Trade Policy - Ethanol Tariff Rate Quota

- China and EU closed their markets to the US ethanol making Brazil the only market available to receive excess ethanol supplies
- US exported 660 MG to Brazil in 2017, three times more than 2016 exports (220MG) and fivetimes more than 2015 exports (135MG)
- UNICA acted to moderate the positions in the industry and produce a fair compromise maintaining ethanol in MERCOSUR's exception list
- August 2017 Brazilian government approved an import tariff of 20% on any import volume exceeding 158.5MG/year quota is average annual import volume from 2014 2016
- Brazil's TRQ represents about 16% of US ethanol exports.
- Tariff is valid for 2 years, starting September 2017. Temporary solution to what we hope is a temporary problem
- In Brazil sugar and ethanol are the same industry NE producers are the most affected by lack of access to larger sugar quotas in markets like US and by imports of ethanol!

## RenovaBio

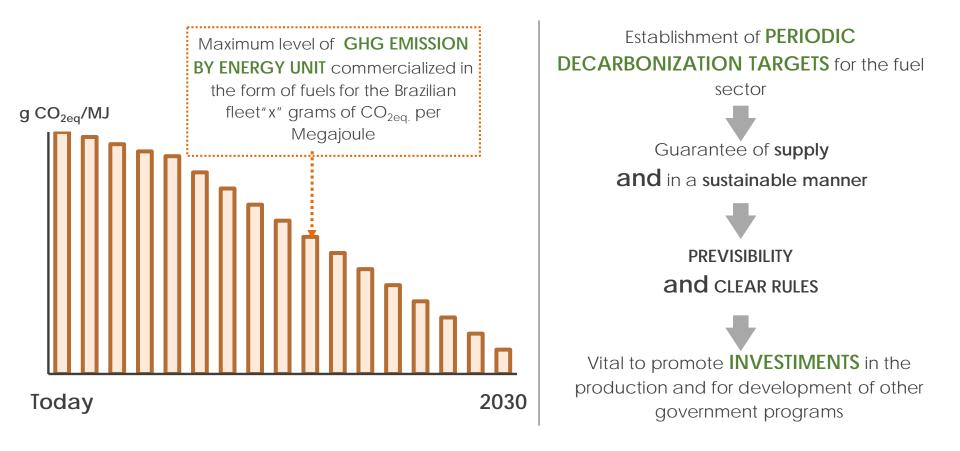


Program promoted by the Department of Biofuels (DBIO) of the Ministry of Mines and Energy (MME)

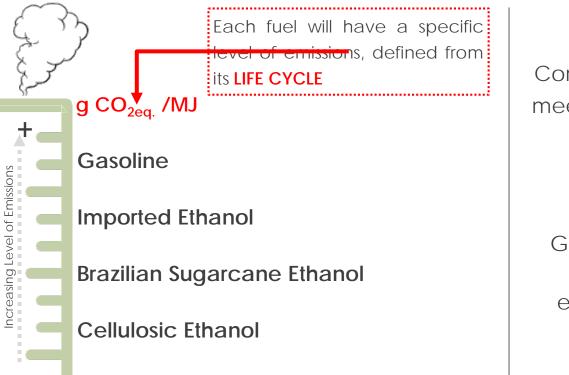
Highly important initiative to ensure emissions reduction through the sustainable expansion of biofuels supply in the country, guaranteeing the fulfillment of the commitments signed in the Paris Climate Agreement and increasing the guarantee of supply

43% reduction of GHG emissions by 2030 when compared to 2005 levels

### Mandate to reduce emissions



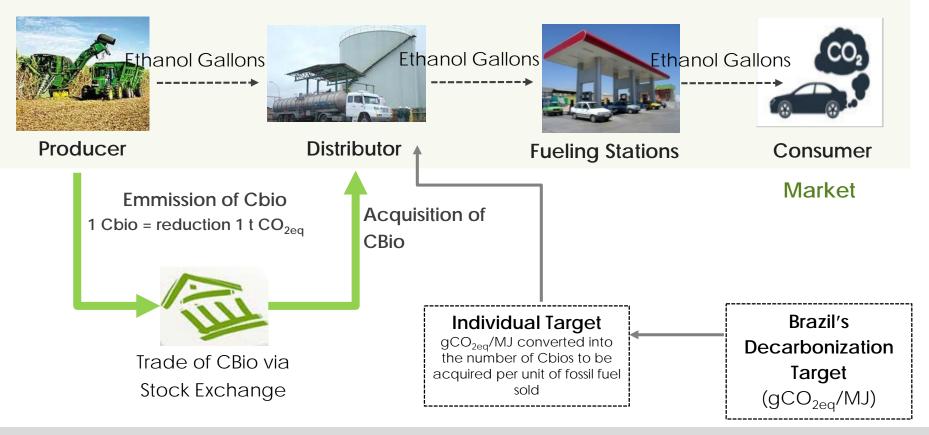
## How will decarbonization targets be met?



Competition between sources in meeting decarbonization targets

Guarantee of incentives for the search for the highest environmental and economic EFFICIENCY

### How the RenovaBio works



## Next Steps

- Up to 6 months after sanction (June 2018): definition of targets
- 18 months after definition of targets: regulatory completion
- Effective from the beginning of 2020

