



RenovaBio **Bioeconomy** **Opportunities for Brazil and the USA**

Brazil-US Business Relations in Florida Seminar
Miami, March 9, 2020

Bento Albuquerque
Minister of Mines and Energy, Brazil

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Biofuel drivers

Environment

Energy security

Economics



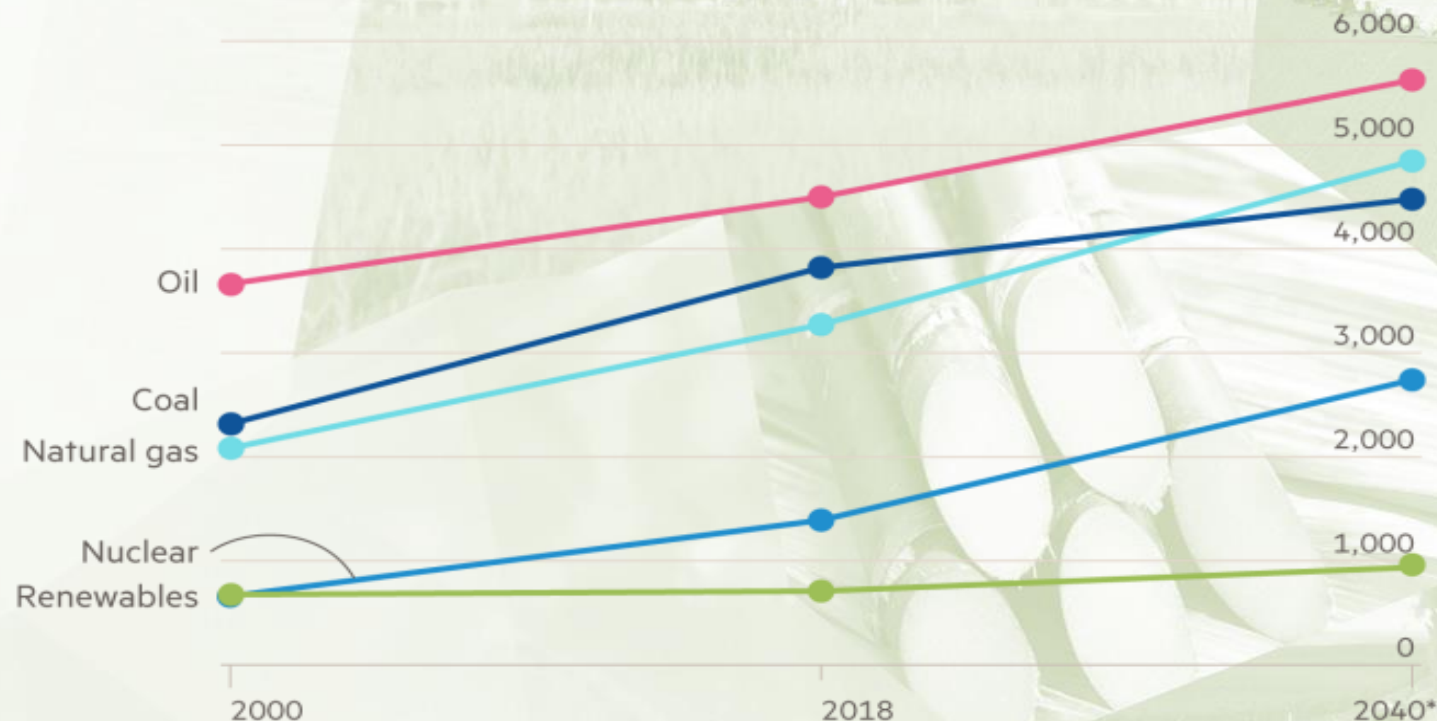
Biofuels: part of the solution



Energy related CO2 emissions

Fossil fuels set to dominate energy demand under current policies

Million tonnes of oil equivalent



	2000	2018	2040*
Total	10,037	14,314	19,177
Fossil fuel share	80%	81%	78%
CO2 emissions (Gt)	23.1	33.2	41.3

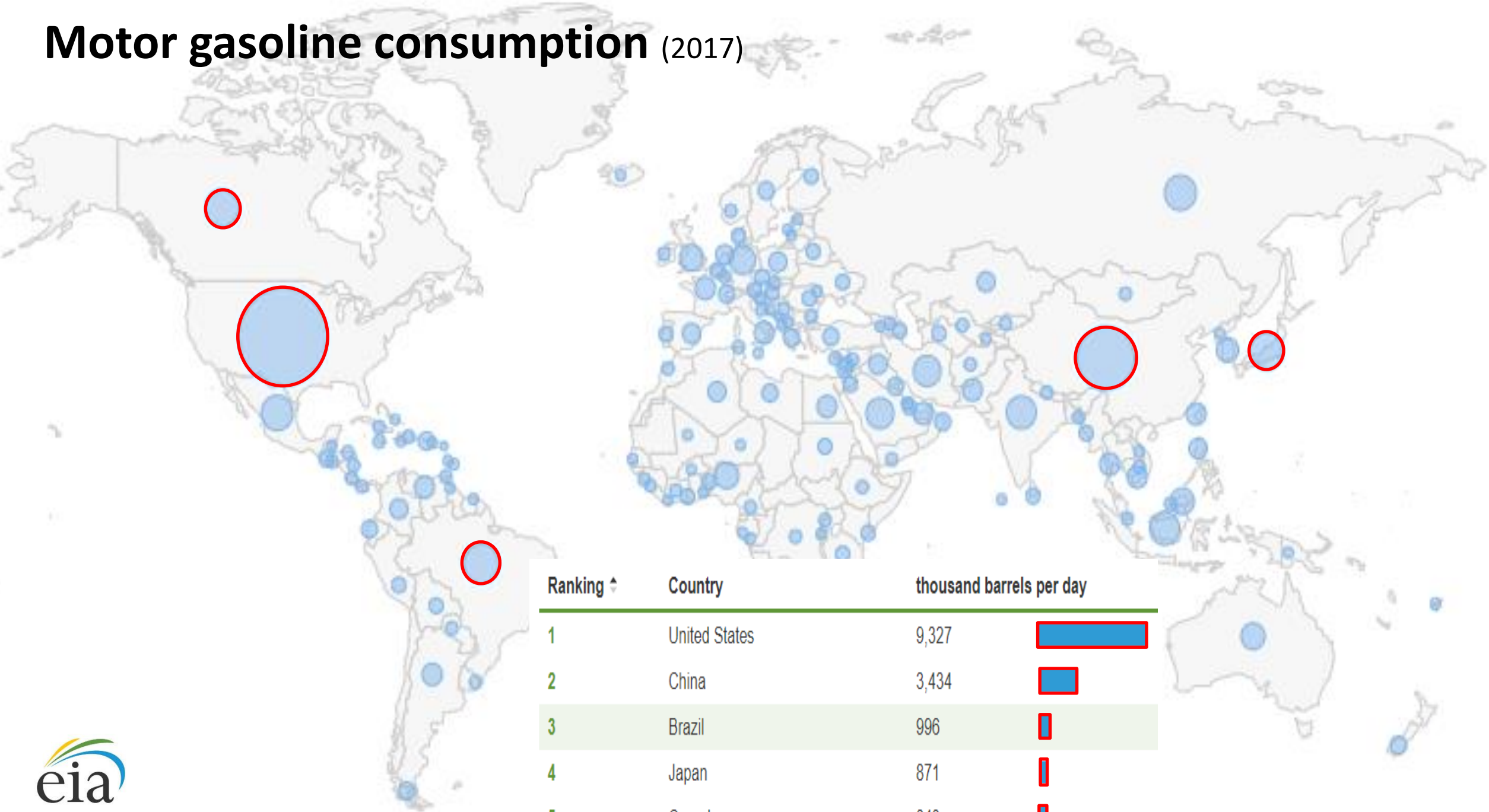
Source: IEA
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* current policies scenario

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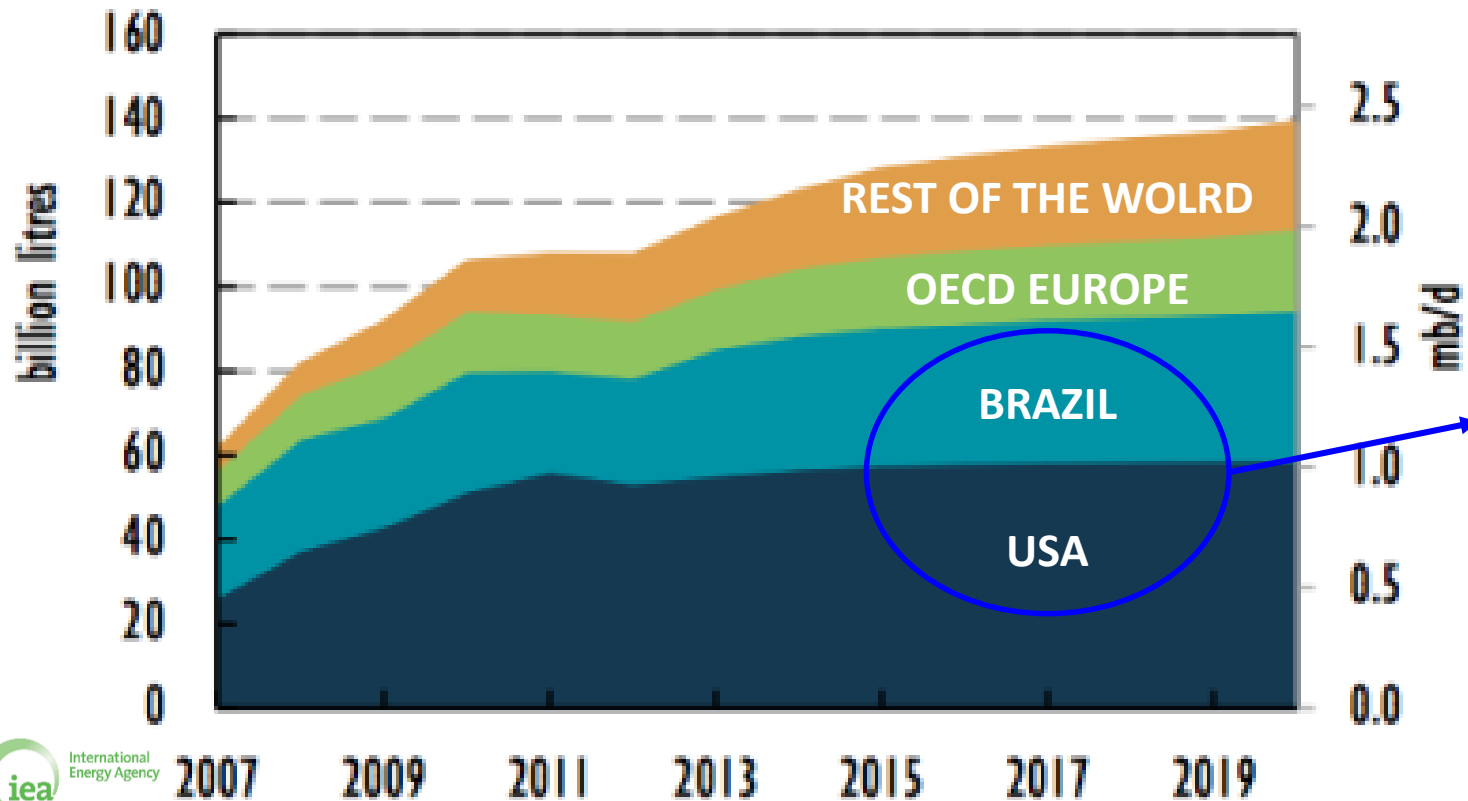
Motor gasoline consumption (2017)



Ranking	Country	thousand barrels per day	
1	United States	9,327	
2	China	3,434	
3	Brazil	996	
4	Japan	871	
5	Canada	843	

Efforts of Brazil and the USA in biofuels

Biofuels

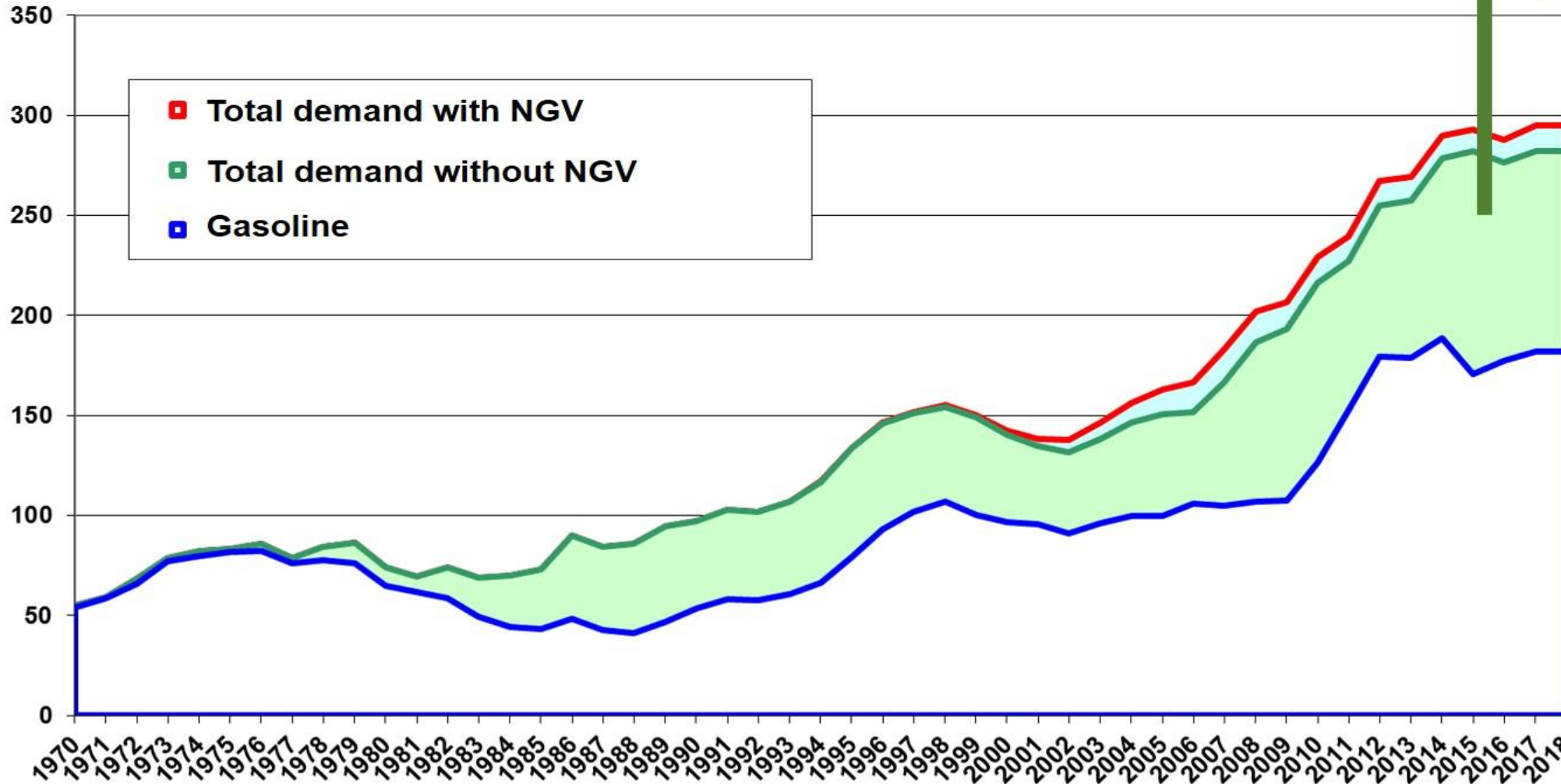


Together, Brazil and the USA have done more for the environment through biofuels than all other global efforts in the energy sector

Ethanol savings and CO2 avoided

FUEL DEMAND FOR THE OTTO CYCLE
Brazil, 1970-2018

10⁶ BOE



2.15
billion
BOE
Barrels of Oil
Equivalent
saved
(2 years of
Brazil's oil
production)

1.34
billion
ton of
CO₂eq
Avoided
Emissions

What comes now?

CHANGES

FUEL



**Less Fossil
More Bio**

PLATFORM



**Flex Hybrid Vehicles
on more efficient platforms**

What we have been doing?

**EMISSIONS
REDUCTION**

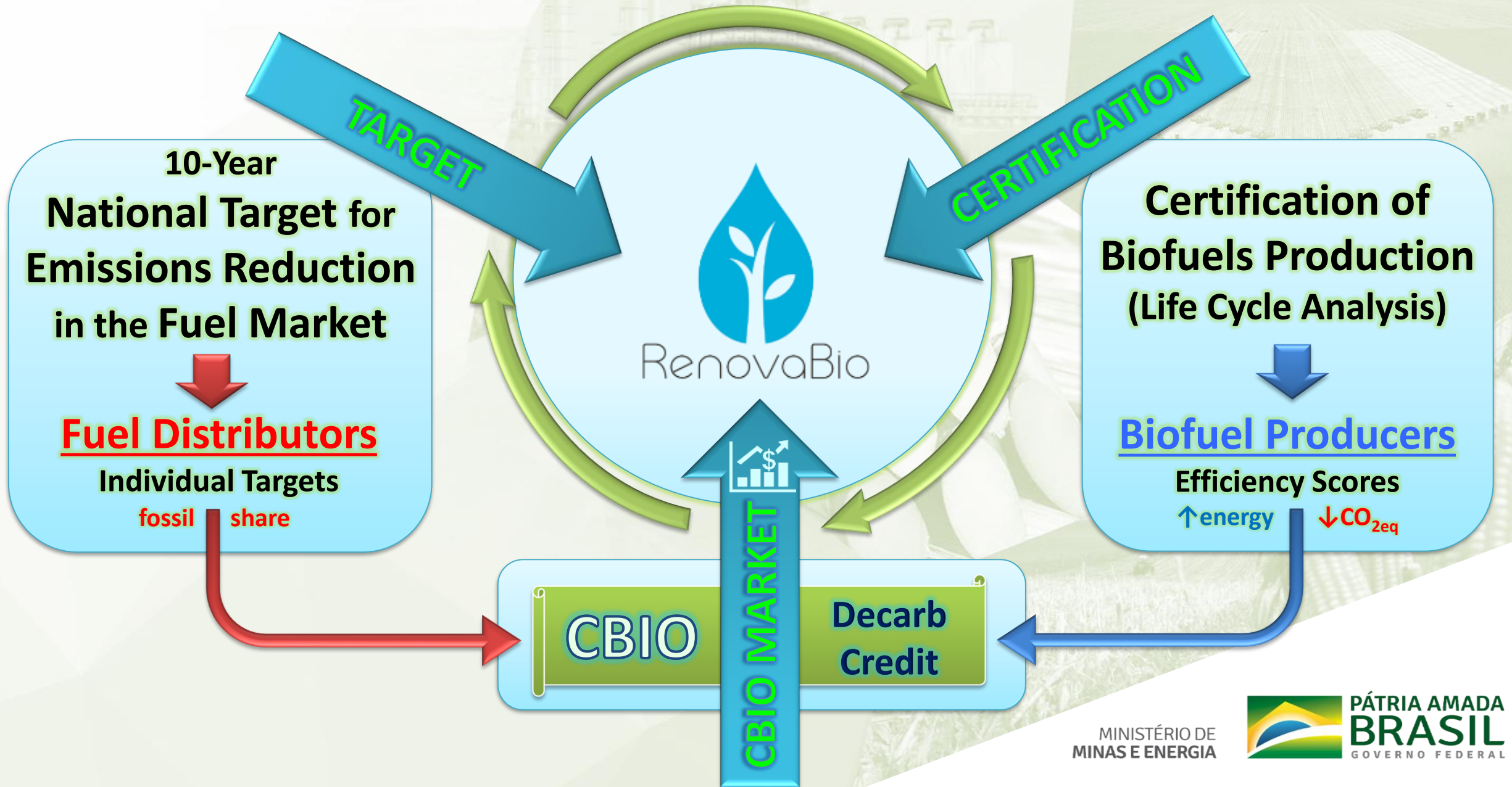
**INDUCTION TO
ENERGY
EFFICIENCY**

PREDICTABILITY



RenovaBio

RenovaBio concept



What does CBIO represent?



1 CBIO \equiv 1 ton CO₂ avoided \equiv 7 trees

2020/2029 TARGET:

Avoid 700 MM Tons of CO₂ \equiv 5 Billion trees



RenovaBio



RenovaBio: a market solution

- It is **not subsidy**
- This is **not an increase in taxes**
- More **competition and efficiency** for the market, which results in lower costs and prices for consumers
- Encourages agribusiness, with consequent reductions in carbon emissions

IT IS THE BRAZILIAN "CARBON CAPTURE MACHINE"



RenovaBio

Positive signs of RenovaBio and investments

- Incentivized Priority Projects (2019-2020)

US\$ 2,5 billions

- Total Investments (2020-2030)

US\$ 223 billions

INVESTMENTS 2020-2030 (US\$ Billion)

Ethanol	157
Biodiesel	58
Biomethane	7
TOTAL	223

Brazil-USA Biofuels Alliance



Connect our low carbon fuel policies



Make our Decarb Credits and biofuels international commodities

US ethanol already can be certified under RenovaBio



Final remarks



Brazil and the United States endorse the diversification of the energy matrix



We have to strengthen our biofuels agenda



Come join this alliance

Obrigado!

Thank you!



RenovaBio

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