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ICAO STOCKTAKING SEMINAR  
TOWARD THE 2050 VISION FOR  
SUSTAINABLE AVIATION FUELS



# SAF in Brazil: overview

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Ubrabio - Brazilian Union Biokerosene

Brazil





## Timeline Brazilian Biojetfuel Program

<p><b>DEC / 2011</b> TAM first demo flight in Brazil Jatropha oil, UOP processing in Pasadena Texas</p>	2011
<p><b>JUN / 2013</b> Flight Plan for Biojetfuels - FAPESP/UNICAMP Launch of the Plataforma Mineira de Bioquerosene</p>	2012 2013
<p><b>JUN / 2014</b> GOL first commercial flight - HEFA World Cup – 300+ GOL low carbon flights</p> <p><b>DEC / 2014</b> ANP – resolution 63 5/12/14 HEFA</p> <p><b>JUL / 2014</b> First international low carbon flight GOL</p>	2014

**JUN / 2012**  
**RIO+20 Aviation Day**

- First demo flight – GOL Airlines
- Leg 4 of Flightpass to a Biofuture – GOL flight with HEFA
- Azul flight with SIP - SYNTHESIZED ISO-PARAFFINS – Embraer E-195
- Launch of the Plataforma Brasileira de Bioquerosene e Renováveis ICAO

**AUG / 2012**  
Ubrabio includes Biojetfuel in its scope:  
União Brasileira dos Produtores de Biodiesel e Bioquerosene

**OCT / 2012**  
First commercial low carbon flight in Brazil - GOL



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União Brasileira do Biodiesel  
e Bioquerosene

## Timeline Brazilian Biojetfuel Program

2015

JUL / 2015

First international flight with biojetfuel – GOL Airlines

2016

NOV / 2016

Launch of the Biofuture Platform at COP 22 in Marrakesch

2017

MAY / 2017

Launch of RBQAV

Brazilian Network for Jetfuel and Renewable Hydrocarbons

2018

DEC / 2017

Senate approves PLS 503/2013 – bill on biojetfuel

PL 9321/2017 - Programa Nacional do Bioquerosene

JUN / 2018

Launch of the Plataforma de Bioquerosene e Renováveis da Zona da Mata

OCT / 2018

Launch of VISION 2030 MG

DEC / 2018

RENOVABIO Lei nº 13.576/2017



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## Brief history of biofuels policies in Brazil

- ProÁlcool Programme (1975)
- Biodiesel Programme (2004)
- Focus on mandates; road transport
- Sustainability: territorial planning and agroecological zoning



# RenovaBio: a new concept







RenovaBio

Creating Emissions'  
Reduction Target  
for Fuel Market



Potential Demand  
for Biofuels

Certification  
of Biofuels'  
Production

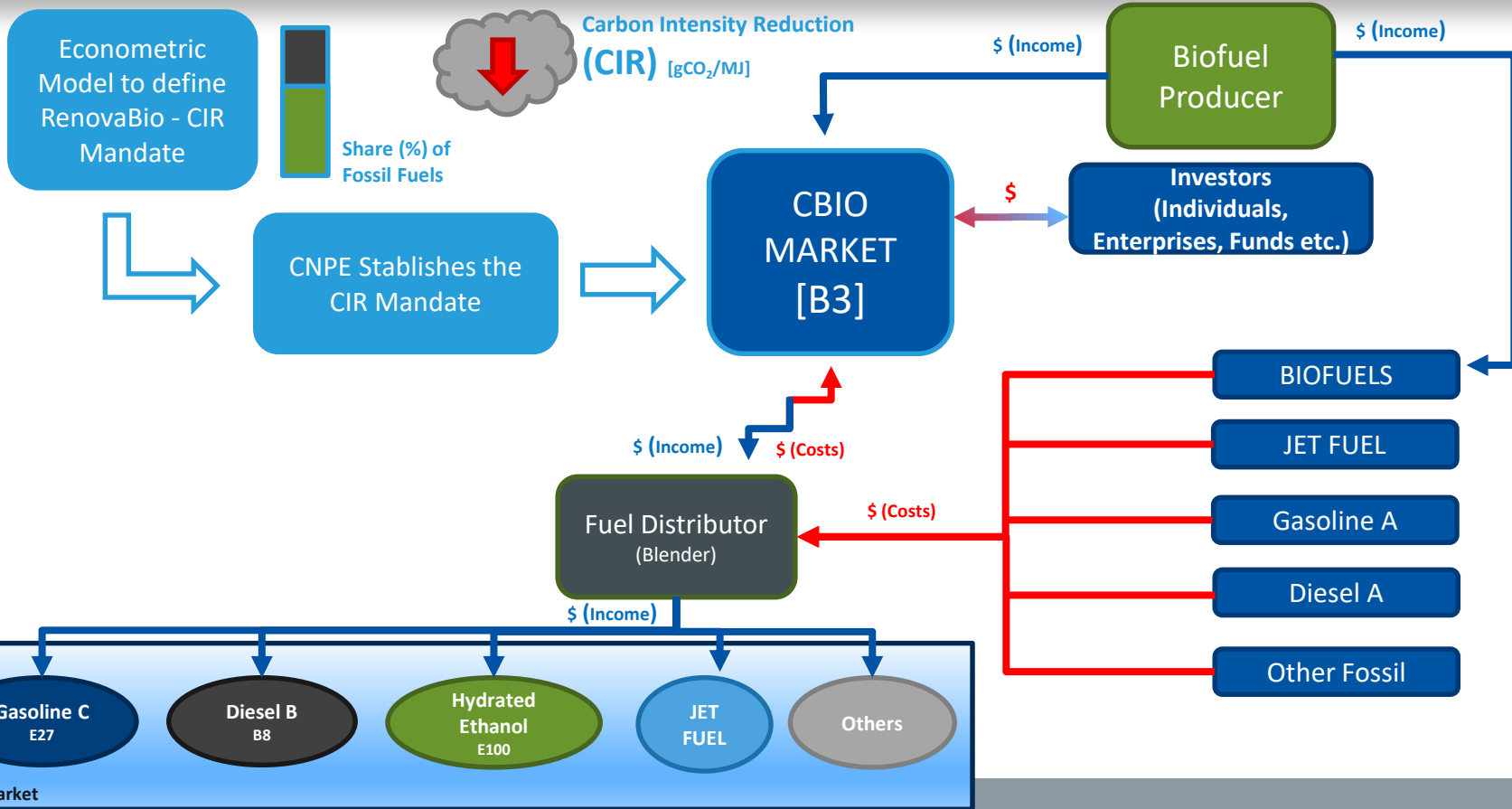


Efficient Production

↑ energy ↓ CO<sub>2</sub>eq

Market







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## Brazilian Network on Biokerosene and Renewable Fuels for Aviation



Partnerships to promote RD&I

Support the creation of public policies for the production of biokerosene and renewable hydrocarbons for aviation





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## Action Plan for GHG Emissions Reduction in Brazilian Civil Aviation

2014



**Action Plan  
First Edition**  
Base Year 2013

2016



**Action Plan  
Second Edition**  
Base Year 2015

2018



**Ministerial  
Ordinance nº  
514/2018**

2019



**Ministerial  
Ordinance nº  
378/2019**



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# Working Group Members

## Federal Government



## Aviation Industry



## Airlines



## Airports



## SAF





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# Workshop Held in Brasilia, February 19-21, 2019

## Panel 3. SAF





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THANK YOU