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ALTERNATIVE FUELS 2017

ICAO Headquarters, Montréal, 8-9 February 2017



# RenovaBio and SAFs

## Brazil's policy under construction

Pedro Scorza (UBRABIO, GOL)





# Five year journey

First experimental flight during Rio+20 Flightpath to a Sustainable Future

National resolution for biojetfuel (ANP) First Brazilian commercial flight

Minas Gerais Biojetfuel Platform Green World Cup: 360+ flights with biojetfuel First Brazilian international flight

Pernambuco Biojetfuel Platform

Regional Initiative

Renovabio and Biofuture Platform



2012



2013



2014



2015



2016



2017



2020



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RenovaBio

Renewable Fuels Program of the  
Ministry of Mines and Energy -  
MME to increase participation  
Brazil in the global  
decarbonization effort with a set  
of public policies "guaranteeing  
tranquility, stability and  
predictability" to investors in the  
sector

## Brazil actual context



biofuture platform

Kickstarting a global, advanced bioeconomy

Launched at COP22 –  
Marrakesch by Brazil and 20  
countries, the Biofuture  
Platform will catalyze  
multilateral projects for  
advanced bioeconomy solutions



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# Working Scenarios

## Minimum scenario for 2030:

Carbon neutral growth from Brazilian airlines flying international routes (CORSIA scope), starting in 2020, will need to avoid close to **1,5 mi tCO<sub>2</sub>e** in **2030**, representing approximately **678.000 ton** of sustainable aviation fuel.

## Desirable scenario for 2030:

Carbon neutral growth from all Brazilian jet fuel market starting in 2020, will need to avoid close to **10 mi tCO<sub>2</sub>e** in **2030**, representing approximately **4.6 million ton** of sustainable aviation fuel.





## Expected Results in 2030

- Will represent close to **2,6% of the Brazilian fuel matrix** (NDC)
- Will avoid emissions around **10 mi tCO<sub>2</sub>e** per year, corresponding to **73 mi new trees** in the same period (CORSIA)
- Potential of **60.000 new green jobs** in the value chain (*projected 2050*), not including family farming as a multiplier
  - **Import replacement of fossil kerosene** (USD \$506 mi in 2015 and a peak of USD \$1,6 bi in 2013).





## For the 2030 scenario to become feasible, we are working to establish a set of policies and actions, connected to the RenovaBio and BioFuture Platform action plans

- **Integration with “green” airports, airline association and jet fuel suppliers:** build a sustainable aviation fuel culture
- **Specific production regulation:** simple rules with clear details for productions sites, rules for coproducts and certification;
- **Quality certification:** Network of certified labs to guarantee FFP quality assurance;
- **Sustainability certification:** assure sustainability in all value chain, meeting socio and environmental standards according to RSB;
- **Incentives:** financial incentives for unit produced (RINs or Bioticket models) and **distinct state taxation for blending;**
- **Funding:** structure financing packages to support the implementation of integrated value chains - “from research to fly”
- **Research and development:** promote R&D programs to support field productivity and process innovation;
- **Integration with biomass value chain:** integration and optimization of the regional biomass and logistics to guarantee regional supply chains.
- **National Biojetfuel Act**





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### Phase One (4Q2016)

Industry demands, open workshop with all entities and stakeholders to develop a consolidated demand.

Status: **Completed in Dec´16**

### Phase Two (2Q2017)

Consolidation of distinct Industry demands (BioDiesel, Ethanol, BioKerosene (SAFs) and Biogas) and actual and new demands policies (common ones). Target is one single document. for a public hearing.

Status: **Under development**

### Phase Three (+2Q2017)

Not clear path: Or a bill to be presented or a policy and regulation coming from

Status: **Not started**





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THANK YOU

**Pedro Scorza**

UBRABIO - Director of Renewables for Aviation

GOL Airlines - Captain and Tech Advisor

[pscorza@ubrablo.com.br](mailto:pscorza@ubrablo.com.br)