

The logo for GOL (Gulfair) is displayed in white on an orange background. The letters 'GOL' are in a stylized, cursive font.

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# Flying Green towards a Sustainable World Cup 2014



SAFUG meeting  
29 oct 2013

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# Presentation Agenda

- ✈️ Brazilian Biojetfuel Platform
- ✈️ Road Map – Next steps
- ✈️ Resolution nº 20 ANP jun 2013
- ✈️ ANAC: Brazil's Action Plan on the reduction of GGE from aviation
- ✈️ **Gol:** The first commercial flight with biojetfuel in Brazil
- ✈️ The DSHC Certification Value Chain

# Brazilian Biojetfuel Platform



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# Brazilian Biojetfuel Platform

- Advisory Board members:
  - Mr. Adalberto Febeliano, ABEAR
  - Mr. Adilson Liebsch, UBRABIO
  - Mr. Al Bryant, Boeing
  - Mr. Gilberto Peralta, GE
  - Mr. Pedro Scorza, GOL Airlines

# Brazilian Biojetfuel Platform

- Steering Committee members:
  - Mr. Donato Aranda, UFRJ (Technology)
  - Mr. Fernando Correa, Byogy (ATJ)
  - Mr. Jamil Macedo, IICA(Feedstock)
  - Mr. Mario Fontes, Bioeca (Camelina)
  - Mr. Mike Lu, Curcas (coordinator/integration)
  - Mr. Rodrigo Gabizo, GE (biojetfuel & systems)
  - Mr. Santiago Giraldo, SGB (Jatropha)
  - Mr. Takashi Kono, Amyris (DSHC)
  - Mr. Walfredo Linhares, Solazyme (DSHC)

# Brazilian Biojetfuel Platform

## Road Map – next steps I

- World Cup 2014
  - SAFUG meeting on Oct. 29<sup>th</sup>, 2013
  - Meeting with SkyNRG on Sustainable World Cup 2014 – Oct. 29<sup>th</sup>, 2013
- MOU Estado de Minas Gerais – Platform for the implementation of short term actions towards a long term biojetfuel integrated value chain deployment– Nov. 2013
- MOU BR Aviation – tank farm in GIG and blending services – Rio de Janeiro International Airport, three (3) one million liter tanks to be made available for blending during the World Cup 2014.
- COP 19 – Warsaw, December 2013

# Brazilian Biojetfuel Platform

## Road Map – next steps II

- ASTM DSHC balloting – December 2013
- MOU Brasilia – Green Airport
- ANP DSHC Resolution ANP update – March 2014
- CAAFI – Platform meeting in Washington, D.C. in January 2014, as a first private sector meeting, in preparation for the next Biojetfuel Bilateral Agreement meeting: key focus, American airlines flying into Brazil with biojetfuel, and returning from Brazil using DSHC.
- Biojetfuel Certification Lab – install a biojetfuel certification lab in Brazil, ANP Resolution 20/2013 compliant – March 2014
- First DSHC flight – April 2014
- Potential State Visit – April 2014 using DSHC
- World Cup flights - June 2014
- Regular commercial flights – July 2014 onwards

# Brazilian Biojetfuel Specification

## Resolução ANP N° 20 DE 24/06/2013

Publicado no DO em 25 jun 2013

A Diretora-Geral da Agência Nacional do Petróleo, Gás Natural e Biocombustíveis - ANP, no uso de suas atribuições, tendo em vista o disposto nos incisos I a XVIII, do art. 8º da [Lei nº 9.478, de 06 de agosto de 1997](#), alterada pela [Lei nº 11.097, de 13 de janeiro 2005](#) e pela [Lei nº 12.490, de 16 de setembro de 2011](#), e com base na Resolução de Diretoria nº 575, de 13 de junho de 2013,

Considerando que cabe à ANP regular as atividades relativas à indústria do petróleo, gás natural e seus derivados e biocombustíveis e, na proteção dos interesses dos consumidores, no que diz respeito a preço, qualidade e oferta de produtos;

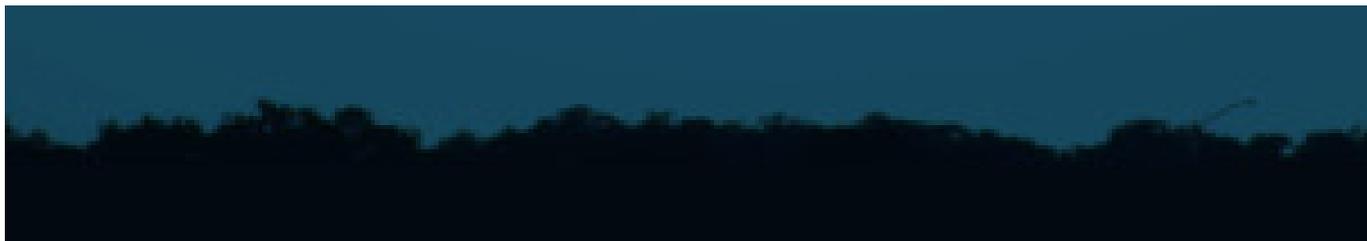
Considerando que cabe à ANP especificar a qualidade dos derivados de petróleo, gás natural e seus derivados e dos biocombustíveis;

Considerando a importância de estimular e consolidar o uso de querosene de aviação de fontes alternativas;

# ANAC Report to ICAO



## Brazil's Action Plan on the reduction of **Greenhouse Gas Emissions** from aviation



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# Aviator's Day

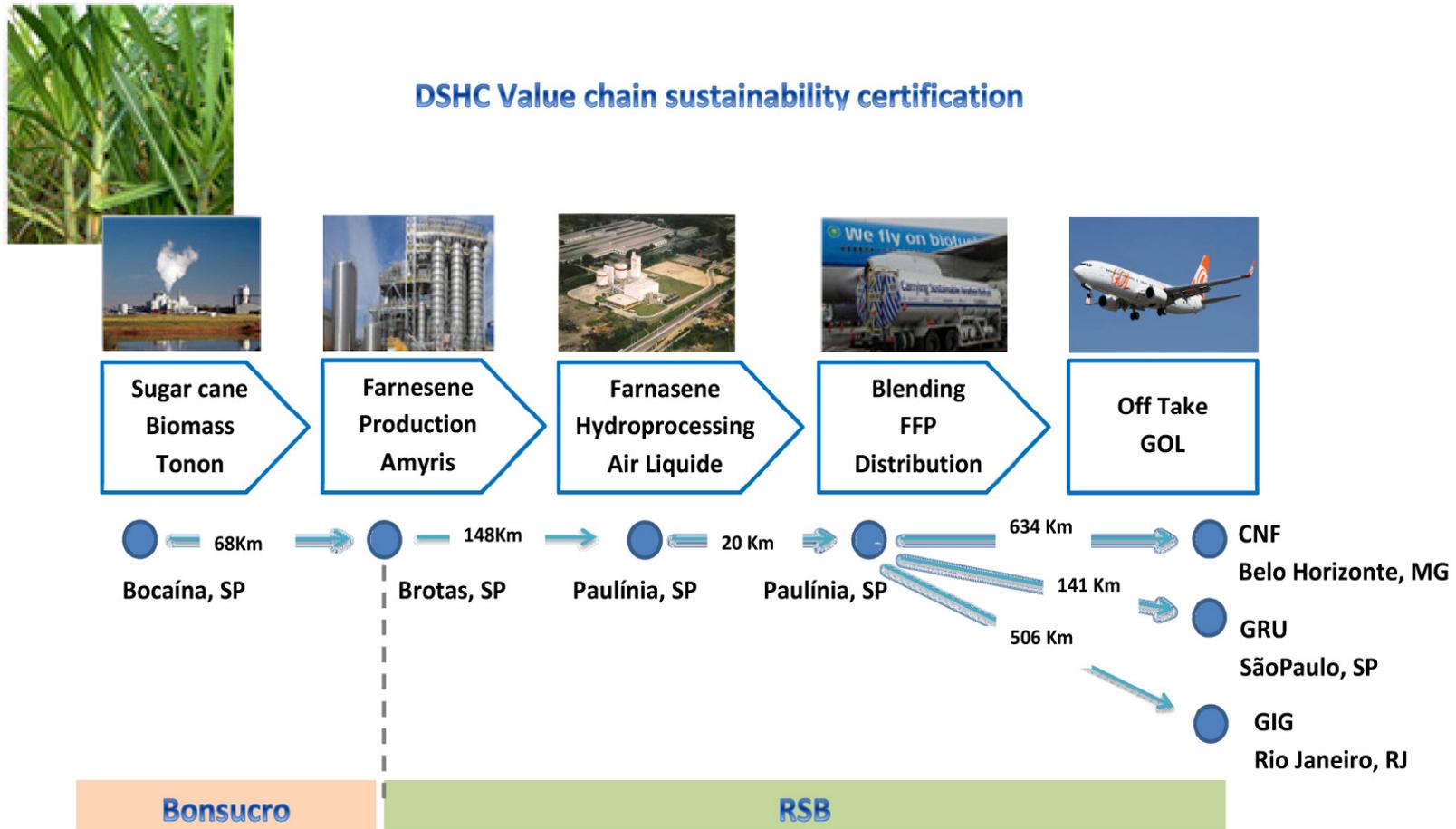
First commercial flight using biojetfuel



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# DSHC Certification Value Chain



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# Come fly with me! Thank You!

**Pedro Rodrigo Scorza**  
*Director of Operations*  
Gol Linhas Aereas Inteligentes

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