



# **BioJet in commercial scale**

## **Logistic and Distribution**

Jun 2018

- **Plural – who we are**
- **Aviation Industry commitment in Environmental issues**
- **Bio Jet in Brazil:**
  - **Refueling is possible**
  - **Increasing demand and limited local offer**
- **Bio Jet: Challenge of commercial scale**



# Associação Nacional das Distribuidoras de Combustíveis, Lubrificantes, Logística e Conveniência



- ✓ 16 empresas associadas
- ✓ Aprox. 70% do mercado de combustíveis e 80% do mercado de lubrificantes
- ✓ 130 bases de distribuição
- ✓ 23 mil postos de serviço com as marcas das associadas
- ✓ 4.800 lojas de conveniência
- ✓ 13 refinarias
- ✓ 54 terminais (5,8 bilhões de litros, 75% da tancagem total)
- ✓ 7.500 km de dutos



# Aviation Industry: commitment with environmental issues



Incentive Programs for emission reduction

Incentive for bio fuels local production in Brazil



Infrastructure: how to stimulate new investments?



Reduce emissions in Aviation industry



**The main target is to lead the country in a new step of progress. To achieve the target is fundamental to connect all initiatives.**

# Bio Jet in Brazil: refueling is a real possibility



Commercial Aviation: refueling with bio jet, form different technologies and approved by airlines and OEMs, made in more than one occasion.

- TAX: manual process
- Segregate equipment's
- International Quality Certificate
- Operation very specific



**BioQAV**

- Compra e frete pela Petrobras América junto a UOP
- Fornecimento inédito em larga escala (total de 1.900m<sup>3</sup>)
- Segregação de tanques, filtros, tubulações e CTAs.
- Certificação do Produto

**Atuação da BR no BioQAV**

Transporte aéreo é responsável por 2% da emissão global de CO<sub>2</sub>

**Emissions reduction roadmap**

- Reduzir em 1,5% as emissões, a cada ano, até 2020
- Reduzir à metade as emissões até 2050

**GOL Copa Verde**

- Custo total da operação: R\$ 1,2 Milhões
- Adicional de R\$ 0,51/litro
- Importação HEFA SPK: 92 mil litros - óleo de milho (80%) e óleos usados (20%)
- De 04/06 a 29/08 fornecidos 2.305.465 litros de B4QAV em 365 abastecimentos

	De 04/06/14 a 29/08/14	
	Nº Voos	Volume
CONFINS	11	44.998
GALEÃO	345	2.220.467
SANTOS DUMONT	9	40.000

WORLD CUP 2014: More than 350 flights with Bio Jet

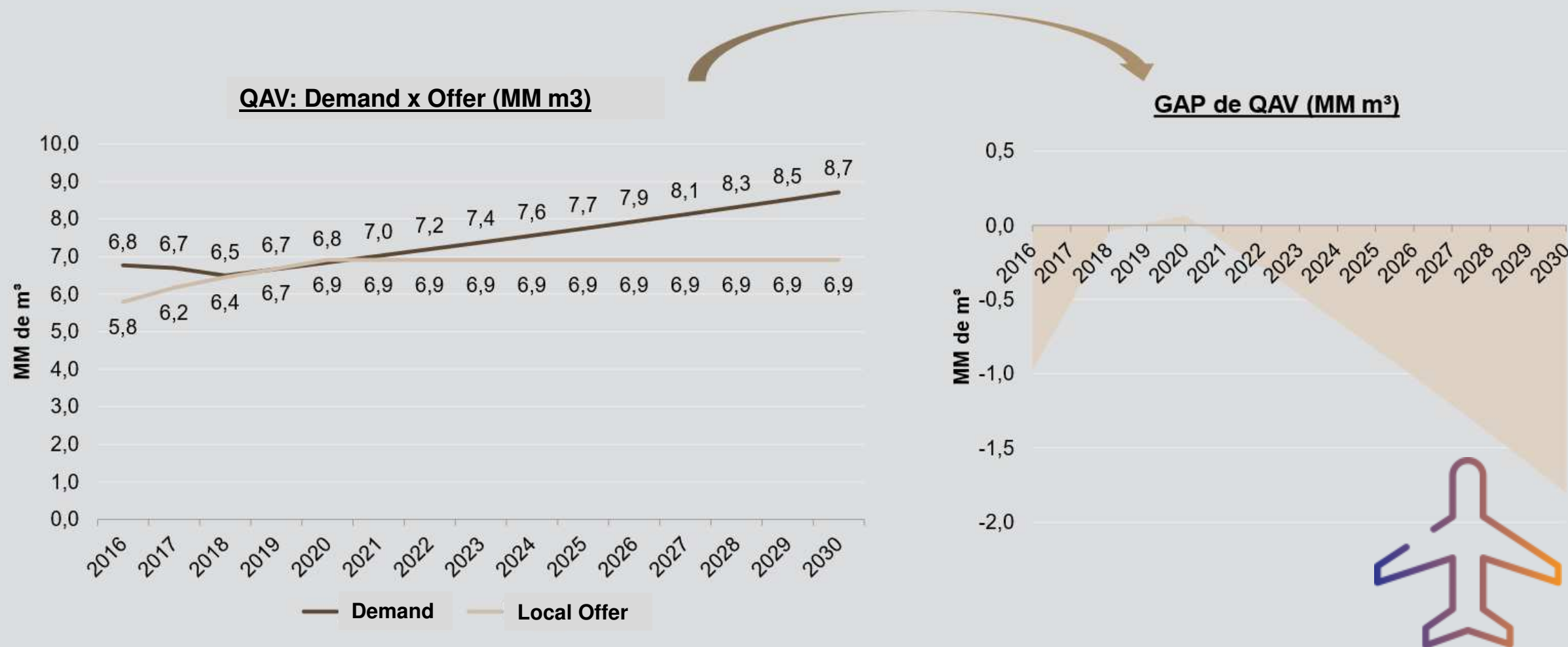


# BioJet in Brazil:

## Increasing demand and limited Jet Fuel local offer



Considering the increase in local refineries production, the local market will have GAP up to 2021 achieving 1,8 MM m<sup>3</sup> in 2030 even in a conservative analysis.



# Bio Jet: Challenge of commercial scale



## Product:

Bio Jet is real. We have more than one option of raw material in a country with natural advantages for bio fuel production.

## Market:

Jet A1 local offer will not be sufficient for the projected demand up to 2021

## Tax:

It's mandatory to create specific tax rules for the new product. Biodiesel example could be used.

## Cost/ Benefit:

Considering no differences in tax, it's important to evaluate the increment in costs: product, logistics, new infrastructure.



## Commercialization:

It's possible to do it but just in specific operations.

## Commitment:

Brazilian Airlines already sign CORSIA.

## Infrastructure:

*Drop in* is not a reality. Bio Jet needs mix with fossil product. In this way the infrastructure for commercialization needs to be segregated and, therefore, built.

The current logistics, based in pipeline, also needs to be prepared for conversion to road transport which requires prior definitions.



**Ana Helena Mandelli**

Aviation Manager

[anahelena@somosplural.com.br](mailto:anahelena@somosplural.com.br)

+55 21 2122-7684

+55 21 97900-4231

+55 21 99162-2884

somosplural.com.br