



Amyris Renewable Aviation Fuel Briefing

*Ethanol Summit 2011
São Paulo, Brazil*



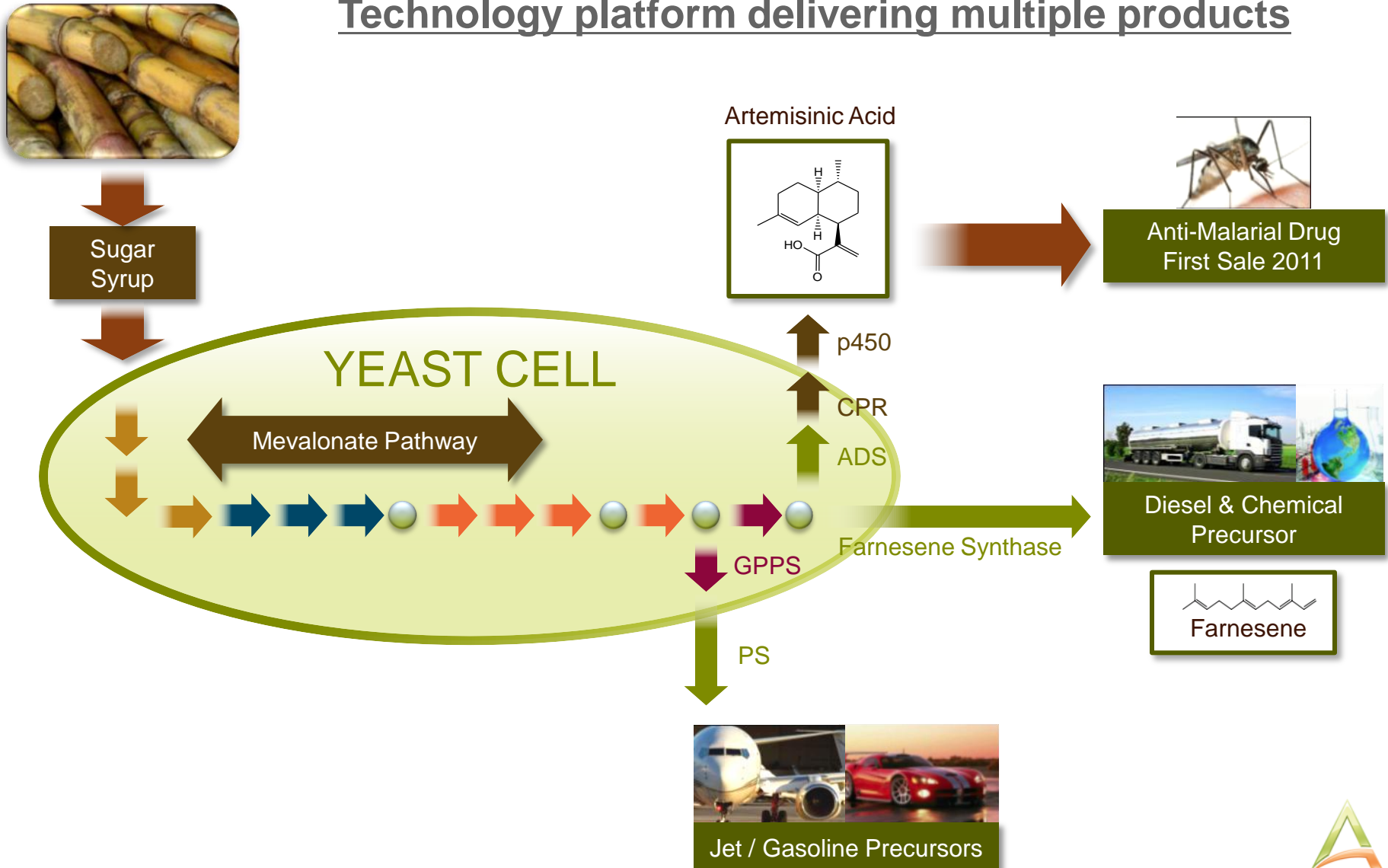
June 7, 2011

Safe Harbor Summary

This presentation includes forward-looking statements that are subject to many risks and uncertainties. These forward-looking statements, such as our statements about our short-term and long-term growth strategies, can sometimes be identified by our use of terms such as “intend,” “expect,” “plan,” “estimate,” “future,” “strive” and similar words. Although we believe that the expectations reflected in our forward-looking statements are reasonable, those statements involve many risks and uncertainties that may cause our actual results to differ from what may be expressed or implied in our statements. Those risks are discussed in our registration statement on Form S-1, which is on file with the Securities and Exchange Commission, particularly in the sections titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” No forward-looking statement is a guarantee of future results, and you should not place undue reliance on our forward-looking statements, which reflect our views as of the date of this presentation. We assume no obligation to update any forward-looking statement contained in this presentation, except as may be required by law.

Amyris renewable fuel development expertise

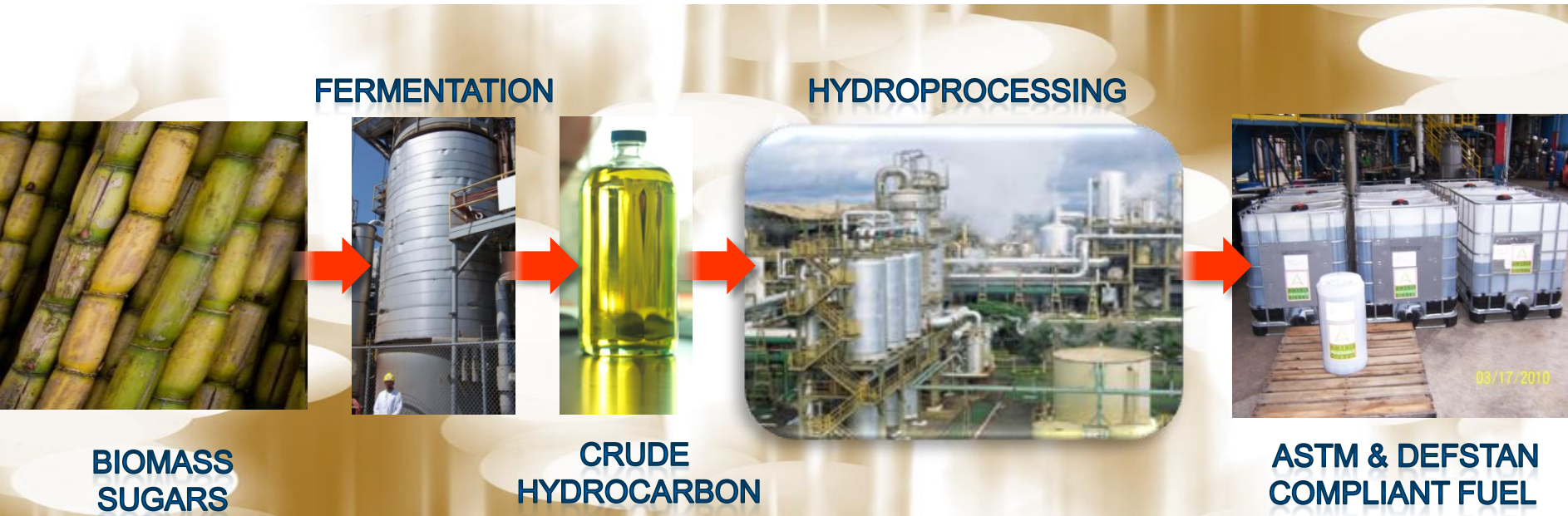
Technology platform delivering multiple products



AMYRIS -TOTAL alternative aviation fuel partnership

- Amyris and Total are committed in an alternative aviation fuel joint development program to develop new fermentation pathways and biomolecules:
 - To develop an effective platform for converting plant sugars into a sustainably-sourced renewable hydrocarbon jet fuel that outperforms petroleum-derived fuel in both exhaust emissions and GHG reduction testing, without compromising on performance quality
- Goals:
 - Produce ‘drop-in’ jet fuel with competitive performance properties to petroleum jet fuel with added renewable benefit
 - Achieve ASTM and Def Stan regulatory validation in key U.S., European and Brazilian markets
 - Acquire OEM acceptance

Amyris-Total Jet A/A-1 production process



Amyris AMJ 700 Candidate Fuel

- **Fermentation-sourced Renewable Candidate Fuel**

- Amyris AMJ 700 is a candidate renewable hydrocarbon jet fuel derived from fermented sugars ... sugarcane

- **Stakeholder Preliminary Assessment**

- Leading jet fuel stakeholders, such as GE Aviation and the U.S. Air Force Research Laboratory at Wright-Patterson Air Force Base, have performed preliminary fuel evaluations, which confirmed the drop-in capabilities and fit for purpose properties of Amyris' AMJ 700 compared to ones that are petroleum-derived

- **Market Expectations?**

- A drop-in, renewable Jet A/A-1 fuel that will outperform conventional petroleum fuel in a range of performance metrics, including fit for purpose and GHG reductions

Amyris Jet Fuel

'Drop-in' candidate molecules targeting Jet A/A1 properties

<u>Component</u>	<u>Structure</u>	<u>Formula</u>	<u>Density (kg/m³)</u>	<u>Fuel Candidates</u>
AMJ-A	Branched cycloparaffin	$C_{10}H_{20}$	801	AMJ-310 ~16% AMJ-3B
AMJ-B	Branched aromatic	$C_{10}H_{14}$	820	
AMJ-C	Branched alkane	$C_{15}H_{32}$	774	

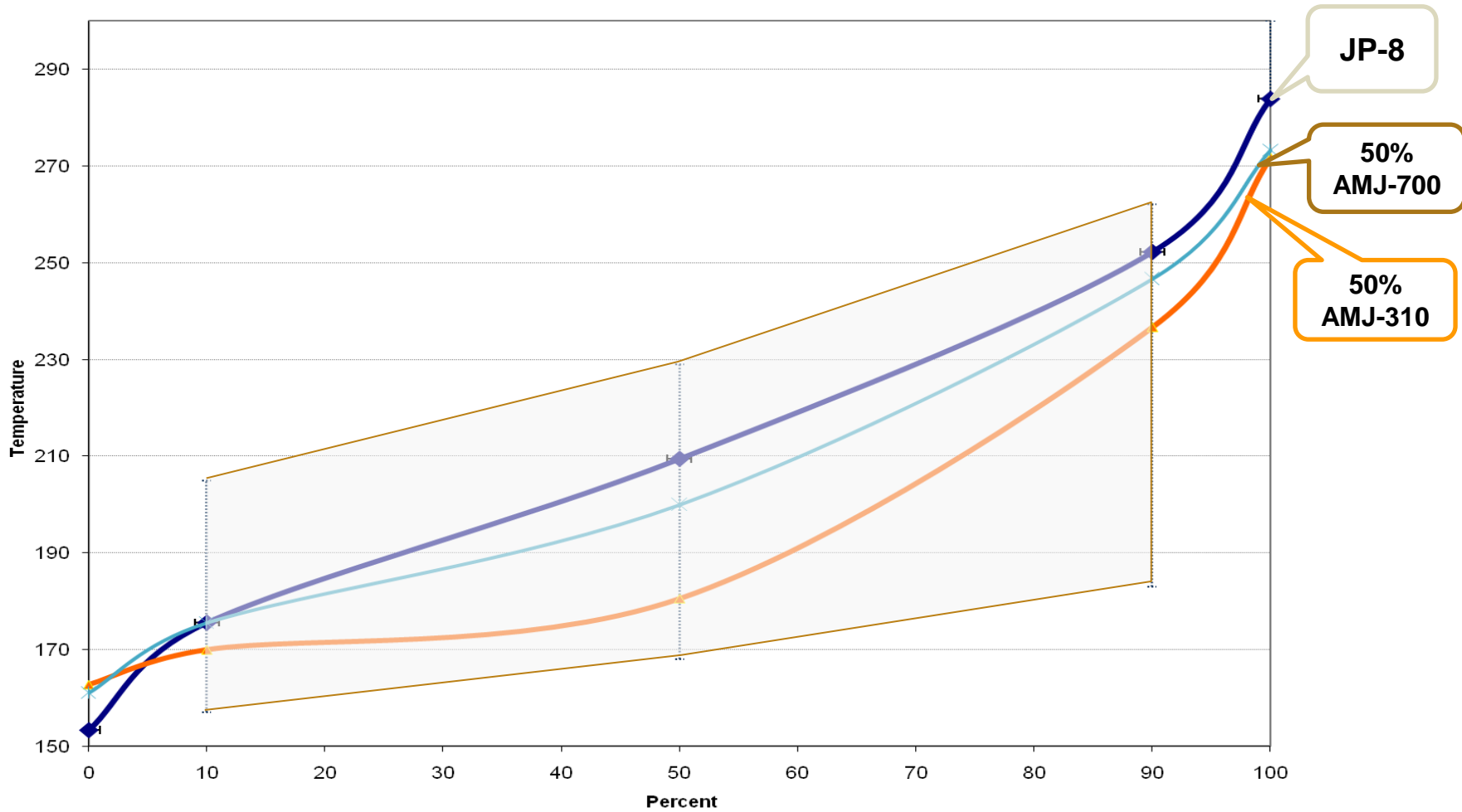
AMJ-700

- 60% AMJ-310
- 40% AMJ-3C



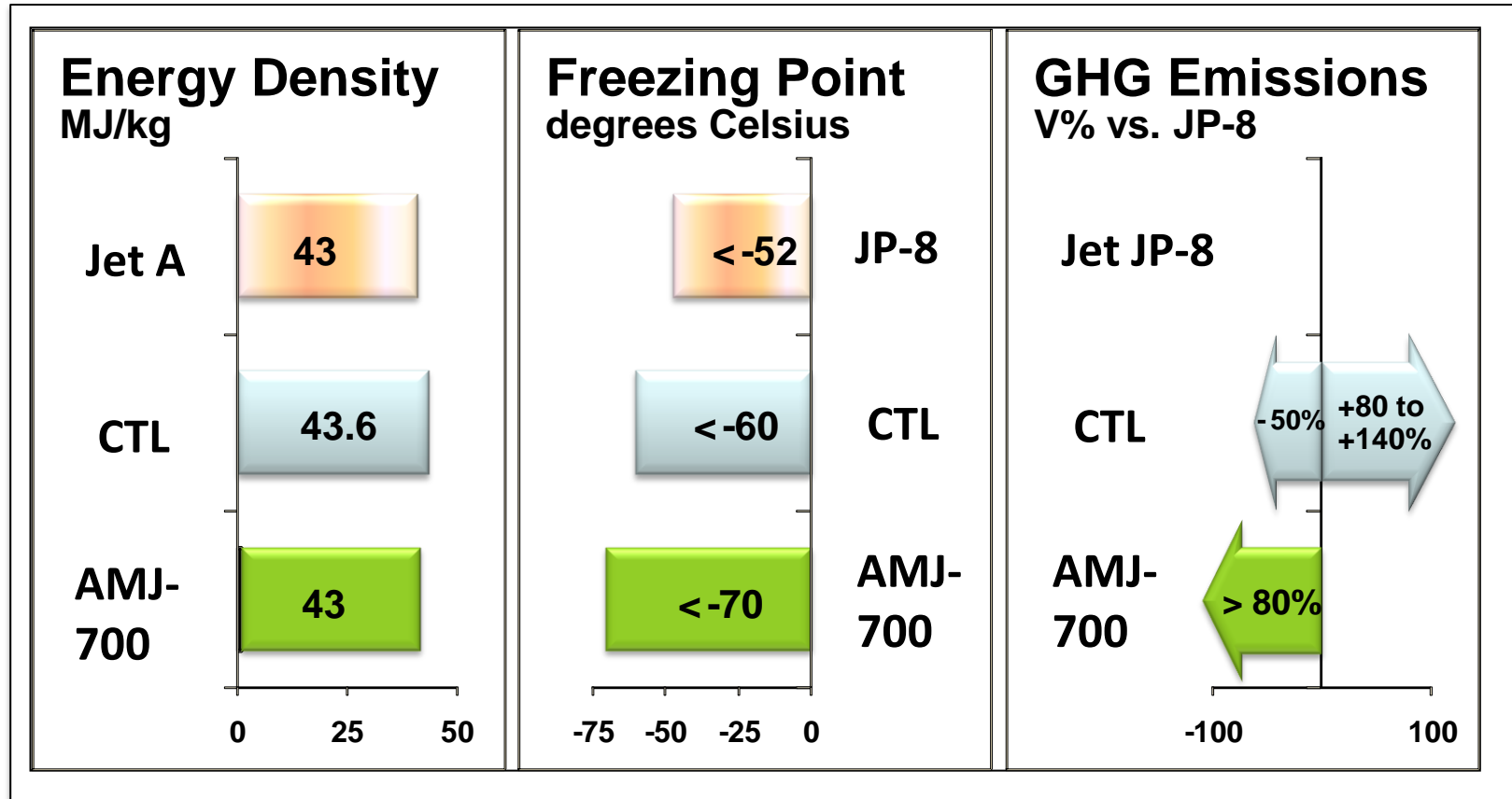
Amyris Candidate Jet Fuels

Ability to engineer the yeast allows "tuning" the distillation properties



Amyris Candidate Fuel Properties

Great fuel property capabilities - AMJ 700

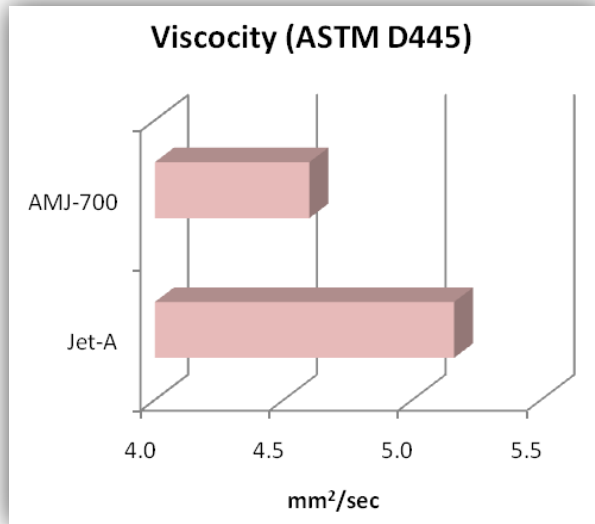


- Amyris jet fuel will be used in blends with conventional jet fuels; values shown above are for neat fuels
- CTL values for energy density and freezing point based on Sasol IPK
- Greenhouse gas reduction for Amyris jet fuel is a preliminary estimate
- Greenhouse gas reduction for CTL based on industry estimates (CBTL with CCS & 30% biomass; CTL without CCS)

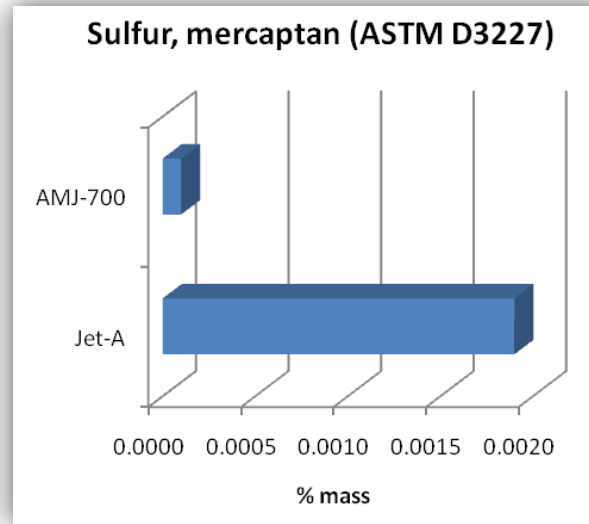
Amyris Candidate Fuel – Fit For Purpose

Great fuel property capabilities

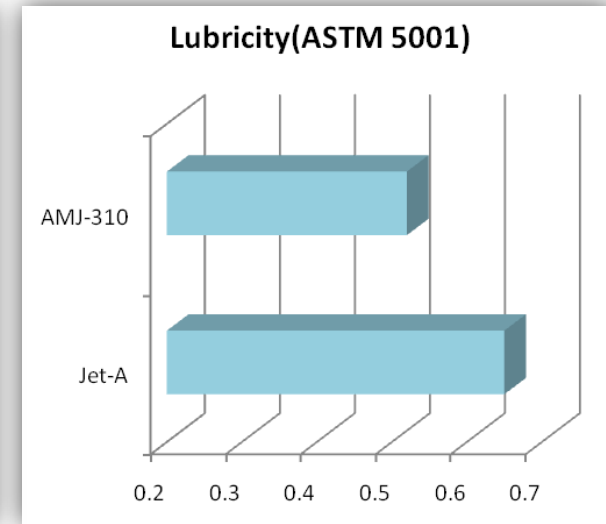
AMJ 700 Fit For Purpose fuel qualities will provide transparent operation



Better Fuel Atomization



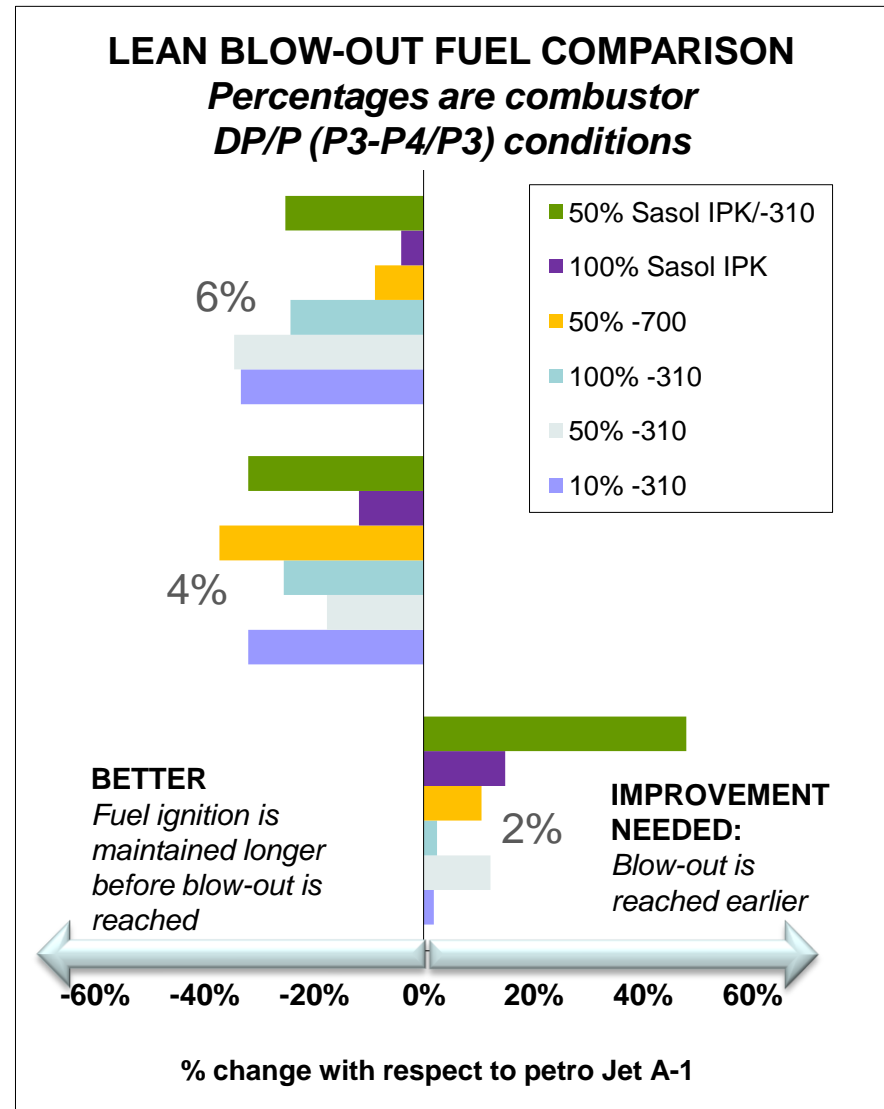
Lower Sulfur Exhaust Emissions



Decreased Engine Wear

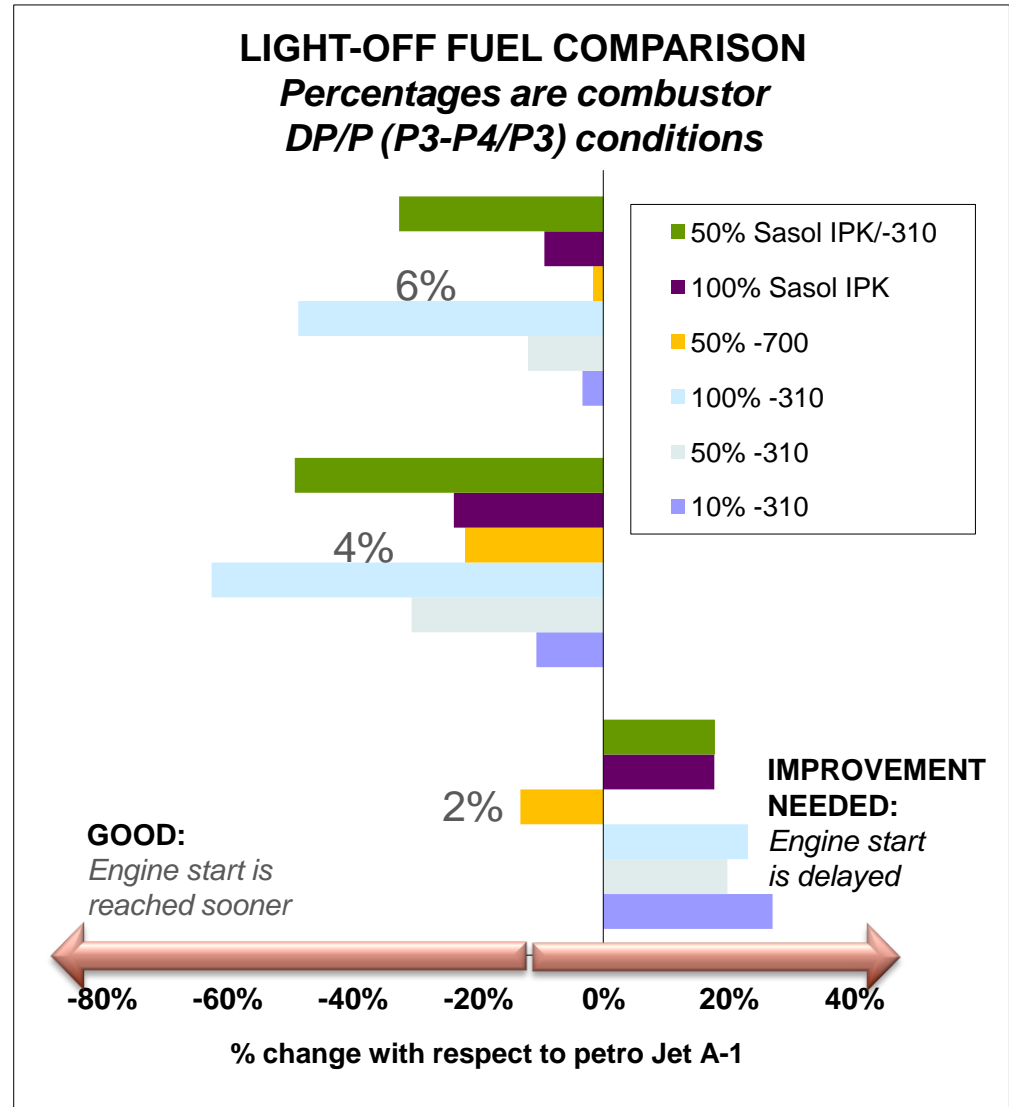
GE Aviation Combustor Rig Tests – *Lean Blow-out*

GE Aviation testing demonstrated that candidate AMJ 700 fuel maintains engine (combustor) fuel ignition better than petroleum Jet A-1 during fuel-lean conditions



GE Aviation Combustor Rig Tests – *Light-off*

GE Aviation tests demonstrated that candidate AMJ 700 fuel achieves engine re-starting better than petro Jet A-1



Partnership Demo Flight in 2012



Objectives:

- Investigate performance on engine and fuel systems
- Final blend fuel meets the ASTM D1655 Table 1
- First flight using fermented fuel (C15 molecule derived from sugarcane)

Deliverables

- Material compatibility data (wing to engine)
- Engine performance data (test rig and in-flight)
- Instrumented flight results
- AMJ sustainability report

Partners:

- Embraer
- Azul Linhas Aéreas Brasileiras
- GE Aviation
- Amyris



Embraer E-190 aircraft



GE CF34-10E



Amyris facility or CMO

AMYRIS-TOTAL alternative aviation fuel

Suitability

Sustainability

Commercialization

- **Compliant with Jet A/A-1 fuel specifications**
- **Drop-in properties for transparent operation**

- **Low GHG lifecycle**
- **Produced by sustainable sugarcane and other abundant fermentable and cellulosic sugars**

- **Air Total global distribution**