

# Sustainable Aviation Biofuels Unified, Focused Transport Leaders Ready for Takeoff!

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[www.caafi.org](http://www.caafi.org)

# Aviation Biofuel – Ready for Takeoff?



Dave Simonds

***WBM Rotterdam (3/12) - 68% see aviation first!***

*The Economist* - October 28, 2010 <http://www.economist.com/node/17358802>)

# Aviation Biofuels – Executing to Plan

- **Snapshot...2006 - 2012...  
achieving transport leadership**
- **CAAFI contributors/approach –  
introducing today's crew**
- **The Challenges ahead**
- **The Path to success**
- **Your Invitation to board aviation's  
focused, unified initiative**

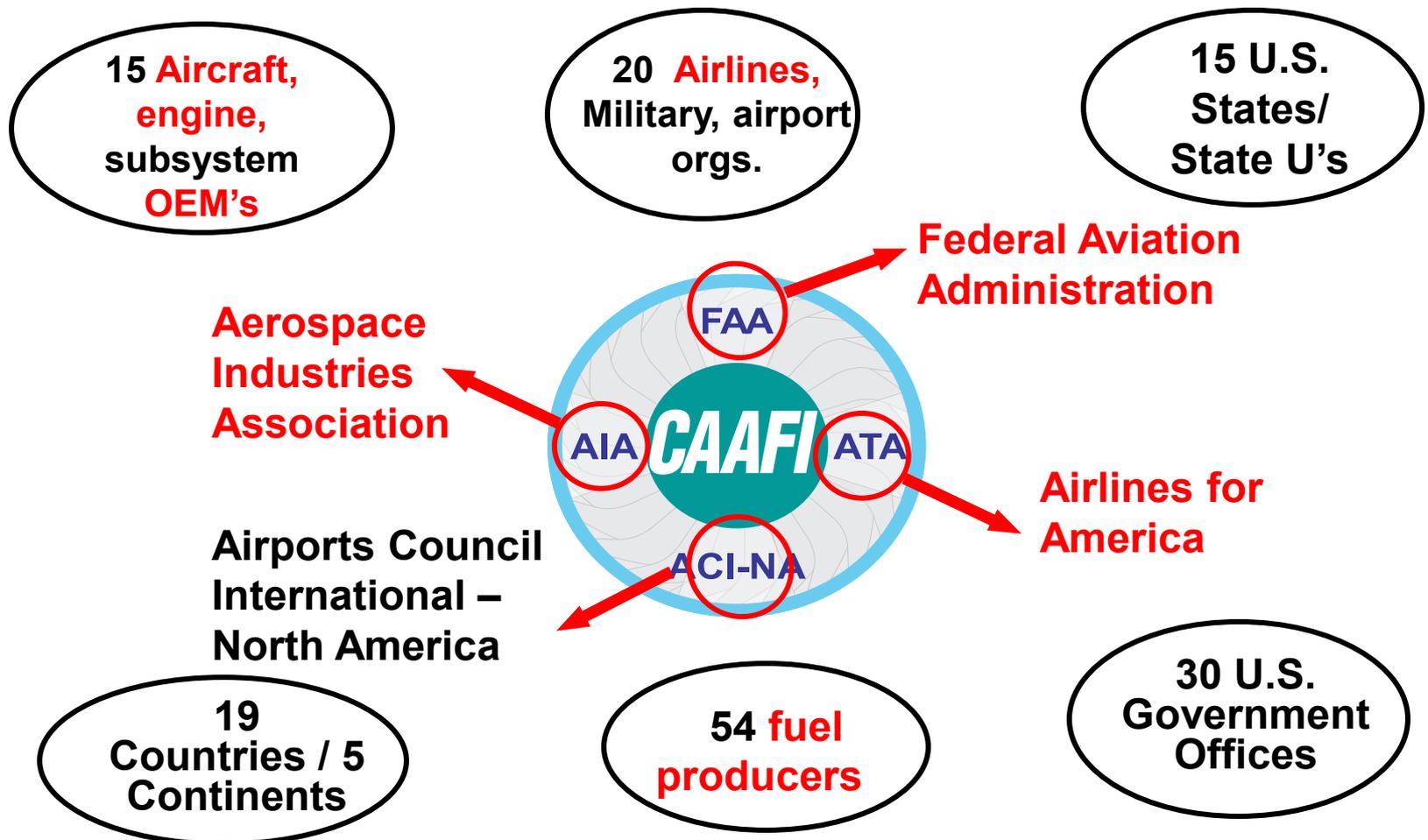
# Sustainable Jet Fuels - Challenges 2006

- No Options to Oil
- Industry Portrayed as Growing Polluter
- 10 Years to Fuel Qualification
- Aviation only 10% of Transport Demand
- Not investible Industry



***CAAFI formed to Propel Aviation***

# CAAIFI - Who We Are / With Us Today



***300 Global Sponsor/Stakeholder Attendees  
180 Different Orgs, 20 B.+ Gals annual U.S. buy***

\* Attendance at 11/30, 12/1/11 General Meeting

# Sustainable Jet Fuels - Snapshot 2012

- Two process options qualified (FT, 09/09, HEFA 07/11)
- Airline Operations Started (07/11)
- Aviation Specific Carbon Life Cycle Analysis (03/10)
- Global Commitment to Carbon Neutral Growth Goal (2010)
- Alliance with Defense (2009) Agriculture, Energy (2010)
- Sustainable Jet Targeted for Deployment by White House (2011)



Luftansa Biofuels Flight Service (07/11)



U.S. Agriculture Secretary Vilsack at Paris Airshow (6/11)

***Aviation Transport Leader for Sustainable Biofuel !***

# 2012 Sustainable Jet Challenges

- **Supplies for currently qualified processes / feedstocks**
- **Reduce Underlying production cost for feedstocks and processes**
- **Establish sustainability success measures with certainty**
- **Build upon global market leadership**
- **Capture infrastructure investment**

**Achieve Rapid Deployment /Carbon neutral growth 2020**

# **Sustainable Jet Challenges Being Met!**

- Qualification of Alcohol and Thermochemical Pathways by 2014 on track**
- USDA led Feedstock Readiness accelerating energy crop yields gains**
- DOE programs speeding learning reducing “learned” out cost at scale within 5 years**
- U.S. RFS2 / RINS sustainability value contribution gaining visibility / acceptance**
- Global Partners.. In Europe, Australia, South America, many U.S. States**
- Equity investment growth, loan instruments expansion...in process.**

# Next Stop Berlin 9/12 – aireg /CAAFI

- Roll out aireg/CAAFI public/private cooperation
- Display aviation's global market with producer / user participants
- Serve as template for broader US/ Europe, global cooperation
- Build investor belief / confidence

## U.S. at 9/12 Conference/Exhibit\*\*

CAAFI  
A4A  
NREL  
NASA  
WEF

Gevo  
USDA  
ARA  
Primus  
Byogy

DOT/FAA  
UOP  
UA  
Westar  
Metron

•Sec. Vilsack (top), Sec. Lahood (middle), media “horde” at CAAFI showcase Paris Airshow 06/11

\*\* as of 7/6/12



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