Introductory Comments and Welcome

Steve Csonka
CAAFI
Executive Director

#CAAFI2022
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Wifi: YTDC_Conference
Password: CBGM22
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Introductory Comments

• Welcome
• CAAFI Team Introduction
• Logistics
• Anti Trust Statement
• Mentimeter
• Event Sponsors
• Agenda Overview

• Helpful information in the Know Before You Go emails

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- Agenda – accessible online

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• Info at bottom of this slide for accessing wifi and social media for posting of comments, photos, and video
• We will be using Mentimeter to capture audience feedback to questions.
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• We are performing a Livestreaming of all three days of the combined SAF Summit & CBGM
• To access the Livestream:

https://airportscouncil.org/caafi/
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- CAAFI’s Founding & Organizational Sponsors

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• All plenary activities in this room
• Breaks in the Pre-Function space to your left.
• Lunch in the two rooms behind us
• Restrooms straight across from the back door on your left
• Emergencies:
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• Violation of the antitrust laws can result in civil or criminal penalties, or both. These penalties can be severe and can be imposed on companies or individuals, or both.

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• Taking into account these antitrust law considerations, participants should not discuss, reach agreements or exchange information about such subjects as:
  • Price- or service-related terms
  • Division or allocation of markets
  • Boycotts or blacklists
  • Agreeing on which suppliers to use
Anti-Trust Statement

The Commercial Aviation Alternative Fuels Initiative (CAAFI) is a volunteer coalition of airlines, aircraft and engine manufacturers, airports, energy producers, researchers, international participants and U.S. government agencies that focuses the efforts of the commercial aviation sector to engage the emerging alternative fuels industry. CAAFI’s goal is to promote the development of alternative jet fuel options that offer equivalent safety and favorable costs compared with petroleum-based jet fuel, while offering environmental improvement and energy supply security for aviation. CAAFI is technology-, feedstock- and company-neutral in its work.

Although not itself a company, CAAFI conducts its work and meetings in compliance with antitrust laws, which flow from the basic principle that groups of companies cannot act together to use their economic power to limit or otherwise harm competition. This means that what can be done individually by a firm or entity could be unlawful if done collectively by a group of firms or entities. Something that may seem to make "good business sense" when done by an individual company can injure competition when done collectively or in coordination by a group of companies and, therefore, may be prohibited under the antitrust laws. This is especially so when the collective or coordinated action involves competitors. Violation of the antitrust laws does not require a formal or written agreement among companies.

Violation of the antitrust laws can result in civil or criminal penalties, or both. These penalties can be severe and can be imposed on companies or individuals, or both. Taking into account these antitrust law considerations, CAAFI does not discuss, reach agreements or exchange information about such subjects as:

- Price- or service-related terms. For example, CAAFI does not discuss or exchange information about pricing information not otherwise in the public domain and does not take, promote, support or discuss a position on pricing of fuels, feedstocks or fuel services or terms for fuels, feedstocks or fuel services.
- Division or allocation of markets or customers. For example, CAAFI does not discuss or exchange information with respect to limiting the geographic availability of fuels, feedstocks or services or products, dividing up the territory in which fuels, feedstocks, services or products will be provided, or dividing up customers.
- Boycotts or blacklists. For example, CAAFI does not discuss or exchange information with respect to limiting or refusing to do business with a business or customer, group of businesses or customers or category of businesses or customers, or a supplier, group of suppliers or category of suppliers.
- Agreeing on which suppliers to use. For example, CAAFI does not discuss or exchange information regarding which suppliers to use or otherwise specify which suppliers to use.

If a SAF Summit / CBGM participant becomes uncomfortable about discussing or acting on an issue because they believe that it is competitively sensitive, the participant should immediately say so and seek the advice of legal counsel before further discussing or acting on it. If so alerted, the lead of the discussion, matter or event should, taking these Guidelines into account, consider steering the discussion away from the area of concern or seeking legal counsel before proceeding on the issue.
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- At various times during the conference, we are interested in capturing audience views
- Log-in to menti.com …
- Enter this code: 5432 4490
- Enter Submit
- Be prepared to respond to questions as they are highlighted by the moderating team
- Let’s try an ice-breaker now
Menti Day-2 Q1:

What one thing do you most want to hear about over the next two days w.r.t. our ability to meet the 3B x '30 goal?

- Log-in to menti.com …
- Enter this code: 5432 4490
- Enter Submit
- Respond to question you see
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Keeping it fun!

First Participant’s Prize Drawing*
  Two Junior Suite Upgrades – Tauvette and Hazen
Second Prize Drawing
  Southwest Airlines 737 Max 8 Airplane Model – Max Eichelbaum
Third Prize Drawing
  Alaska Airlines 737-900 Airplane Model
Fourth & Fifth Grand Prize Drawings (must be present to win)
  American Airlines Boeing 787-9
  Technology Livery Airbus A350

* Courtesy of our commercial financial sponsors
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Wednesday

SAF Summit:
- Introductory Comments & Welcome
- Government Commitments to SAF
- Framing the SAF Challenge
- US Policy
- Government & Aviation Working Together
- Progress on 3B x ’30 Industry Pledge
- SAF Grand Challenge Roadmap Overview
- Perspectives Panel: SGC
- SGC Feedback Session

Thursday

CBGM Day 1:
- Resources Available to Achieve 2030 Goal
- Feedstocks to Support 3B x ’30
- Near Term Commercialization Activities
- Government & Aviation Working Together
- Critical Value Proposition – Key Issues
- ASTM Cert/Qual
- 100% SAF
- Sustainability & Transparency via Innovative Mechanism

Friday

CBGM Day 2:
- Supply Chain Groundwork
- Other Enablers
  - Airport Efforts
  - State & Local Policy
- End User Perspectives
  - Airlines
  - Business Aviation
- International Efforts
- Future of SAF
  - Now Through Beyond 2030
  - Evaluation of SAF Benefits
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Thursday
CBGM Day 1:
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• Critical Value Proposition – Key Issues
  • ASTM Cert/Qual
  • 100% SAF
• Sustainability & Transparency via Innovative Mechanism

• Evaluation of SAF Benefits
CAAFI Biennial General Meeting Day 1
Panel Discussion: Funding Resources Available to Achieve Roadmap Targets

Moderator
Steve Csonka,
CAAFI,
Executive Director

Panelists
Valerie Sarisky-Reed,
DOE Bioenergy Technologies Office, Director
Chris Cassidy
USDA RD, Renewable Energy Advisor
Jim Hileman
DOT/FAA-AEE, Chief Scientific & Technical Advisor
William Goldner
USDA-OCS, Sr. Advisor, Renewable Energy, Natural Resources, and Environment
Ramsey Fahs
DOE, Loans Program Office, Policy Advisor

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Panel Discussion: Feedstocks and Supply Chains for 2030 Targets

Moderator:
William Goldner
USDA-OCS, Sr. Advisor, RENR&E

Panelists:
Michael Wolcott
Washington State University, ASCENT Director
Geoff Cooper
Renewable Fuels Assoc. (RFA), Pres. & CEO
Paul Argyropoulos
Policy Nexus Advisors, President, Supporting ABFA
Tim Theis
DOE/ORNL, Bioenergy Technologies Program Manager

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CAAFI Biennial General Meeting

Special Address – Winter-Cover Oilseed Progress

Jerry Steiner
CoverCress
Chairman

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CAAFI Biennial General Meeting

15 Minute Break

Return at 10:55
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Welcomes you to the 2022 CBGM
We’re on break, We’ll restart at 10:45
Near-term Commercialization to Support 3 Billion Gallons of SAF in 2030

Parade of U.S. SAF Commercialization Efforts

Presentations from 16 companies with near-term SAF commercialization activities that have the potential to contribute to the 2030 SAF target, discussing potential for progress as well as key challenges.
U.S. SAF production forecast
Announced intentions, neat*

<table>
<thead>
<tr>
<th>Est. Year-end Production (M gpy)</th>
<th>Lakeview 6</th>
<th>gevo Net Zero SD 22.5</th>
<th>world energy Paramount B 250</th>
<th>AEMETIS Carbon Zero Riverbank+ 22</th>
<th>VeoCys Bayou Natchez, MS 33</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. SAF production forecast</td>
<td>Sierra 7</td>
<td>Rodeo 290</td>
<td>Bon Wier, TX 26</td>
<td>Lanzajet Hennepin 120</td>
<td></td>
</tr>
</tbody>
</table>

Unannounced or In-development efforts:
- 70+ additional new-entrants collaborating with CAAFI network
- Outlined expansion goals of entities like LanzaJet, Gevo, Alder, Fulcrum, ...
- Refinery co-processing / conversion
- Renewable Diesel switching pending BTC approval

Exact Timing & Production tbd

30 June 2022

By YE '22
- Not comprehensive; CAAFI estimates (based on technology used & public reports) where production slates are not specified. Does not include various small batches produced for testing technology and markets.
- Does not include fractions of substantial Renewable Diesel capacity (existing and in-development) that can be shunted to SAF based on policy support
Who are these 70+?

AgBioEn  Agilyx  Air Company
ARA   Arborata  Astra  Alleo
Biomass Solution  Byogy  C3 Bio-Tech  Bio Carbon Fuels
Capergy  Cetna Energy  Cielo  Calumet
Clean Joule  Clean Planet  Covenant  Cinergic
EcoTech  Enerkem  Evolve  D’Arcinoff
FCL  GGES  GranBio  Expander
Gron  Hughes Energy  IL Clean Fuels  Greenfield Global
IWP  Joseph  LA Green Fuels  Indaba
Next  Peregrin  Preem  Loring
Raven SR  Refuel Energy  Renew West  Rainforest
RiverFront  RUWI  SAFiRE  Rikarbon
SarTec  SGP  Sierra  SAFuelsX
Steeper  Vertex  Vertimass  SixRing

Another 16+ in the PTL space

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Parade of U.S. SAF Commercialization Efforts
- Projected 2030 progress, and key challenges

Gene Gebolys  World Energy
Pratik Chandhoke  Neste
Lindsay Fitzgerald  Gevo
Benny Wong  Fulcrum
Alex Menotti  LanzaJet
Jeff McDaniel  Velocys
SAF Summit

Lunch: Sponsored by Alder Fuels

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Lunch

Return at 1:15
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2022 CBGM
We’re on break, We’ll restart
at 10:45
Parade of U.S. SAF Commercialization Efforts (cont.)

- Projected 2030 progress, and key challenges

Nick Andrews  USA Bioenergy
Amy Malaki  SkyNRG Americas
Bruno Miller  Alder Fuels
Stu Porter  Forge Hydrocarbons
Brice Dally  Virent
Alex Iordan  SAF+ Consortium
Brian Ripsin  Shell Aviation
Dave Stallwitz  Phillips 66
CAAFI Biennial General Meeting

15 Minute Break

Return at 10:45

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Key Issues to Enable End Use
- ASTM Certification / Qualification Update

Mark Rumizen
FAA,
Sr. Technical Specialist
Key Issues to Enable End Use
- 100% Synthetic Aviation Turbine Fuel Update

Gurhan Andac
GE Aviation, Engr’g Technical Leader, Aviation Fuels

Stephen Kramer
Pratt & Whitney, Manager, Combustor Technology
Panel Discussion: Delivering on Sustainability and Transparency via Innovative Mechanisms

Moderator

Panelists

Aaron Robinson
United Airlines, Sr. Mgr. Enviro. Strategy & Sustainability

Adam Klauber
World Energy, VP Sustainability and ESG

Elena Schmidt
Roundtable on Sustainable Biomaterials (RSB), Executive Director

Tim Obitts
NATA, Pres. & CEO Supporting CoSAFA

Andre de Fontaine
Engie Impact, Sr. Mgr. Supporting SABA
Closing Remarks

Chris Tindal
CAAFI
Assistant Director
Networking Reception
5:45p
Rooms 7 & 8
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