



CAAFI 2014 General Meeting & Expo

CAAFI Challenges

Moderated by: Steve Csonka, CAAFI

Produced by



Focusing on Our Biggest Challenges

Where/how can CAAFI help most



28Jan'14

CAAFI “Charter” ... Fostering Opportunity

- * **Promote / Advocate / Communicate**
- * **Align / Coordinate**
- * **Initiate action – bring players together**
- * **Create tools, frameworks, language**
- * **Disseminate information, guidance**
- * **Supply the integrated-initiative perspective**
- * **Focus domestically / foster internationally**

CAAFI (as an entity) doesn't directly:

- * **Execute R&D**
 - * **Resource supply chain initiatives**
 - * **Provide capital or financing**
 - * **Purchase fuel**
- ... but our members, sponsors and partners do, so we focus on bringing them together ...**

CAAFI Work Teams, working to ...

Research & Development

*Enabling
Multiple “Drop-in”
Solutions*

Certification / Qualification

*Fostering
ASTM D7566
Approval*

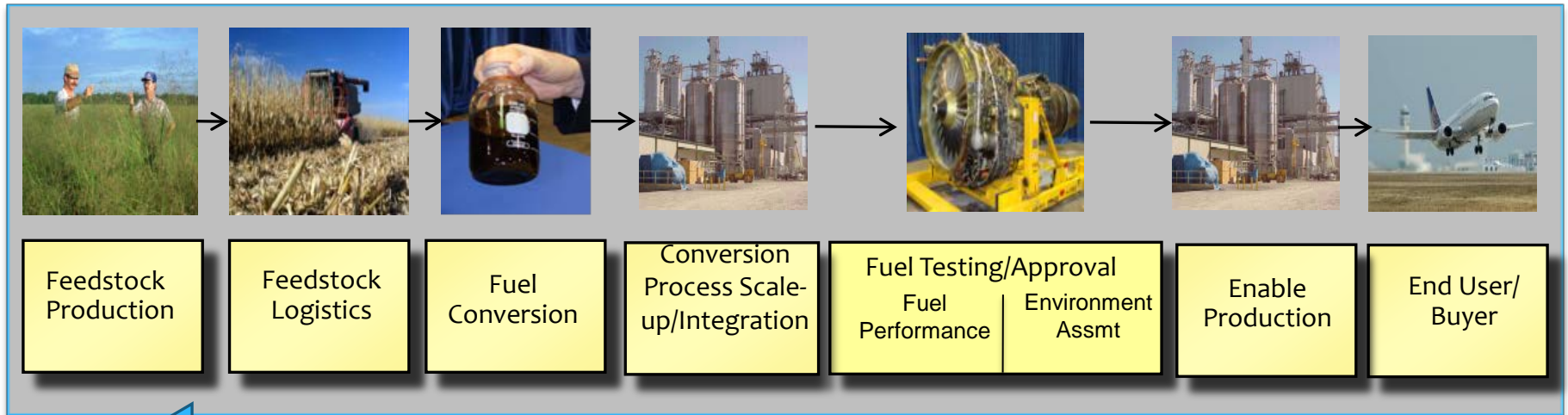
Environmental

*GHG LCA, PM2.5
Quantification,
Sustainability*

Business

*Facilitating
Deployment,
Investment*

... define the full Supply Chain ...



Focus and communicate requirements “Flow Down”

Facilitate maximum opportunity “Flow-up”

Areas of potential additional focus

- * **R&D roadmapping, especially internationally**
- * **Feedstock development**
- * **Integrated supply chain**
- * **Financing**
 - * **Risk Reduction – see CAAFI Guidance**
- * **Matchmaking**
- * **Individual project development – States Initiatives**

R&D Team Breakout Session, Tuesday, January 28, 2014

Time	Session Title/Description
2:00 – 2:10 p.m.	Introductions: <i>Mike Epstein to facilitate a brief overview of the participants and their relevant R&D activities</i>
2:10 – 3:00 p.m.	Identified Challenges and Gaps <i>Moderators Ellen Stechel, Kirsten Van Fossen, Mike Epstein, Stephen Kramer, Zia Haq:</i> <i>The moderators will briefly present the previously identified challenges and gaps and give updates on their progress; Additional R&D team input on updates encouraged, if applicable</i>
3:00 – 3:10 p.m.	Summary of General Meeting Messages <i>Mike Epstein moderated discussion: An opportunity to refresh on the views voiced by the expert panel and general membership</i>
3:10 – 3:30 p.m.	Break
3:30 – 4:30 p.m.	Future Directions Discussion: Challenges and Gaps <i>Stephen Kramer moderated discussion: What is missing, what should be prioritized, and how these relate to General Meeting discussion?</i>
4:30 – 4:50 p.m.	Future Directions Discussion: Communication Efforts <i>Stephen Kramer moderated discussion on efforts to-date, clarification of R&D team needs, potential improvement, and how these relate to General Meeting discussion</i>
4:50 – 5:20 p.m.	Future Directions Discussion: Feedstock Readiness Level (FSRL) <i>Kristin Lewis moderated discussion seeking R&D team input for improving FSRL uptake</i>
5:20 – 5:30 p.m.	Next Steps and Closing Remarks: <i>Mike Epstein</i>

Environmental Team

Environmental Team Breakout Session, Tuesday, January 28, 2014

Time	Session Title/Description
2:00 – 2:10 p.m.	Opening Remarks and Introductions , <i>Nancy Young, A4A</i>
2:10 – 3:10 p.m.	Sustainability Issues and Environmental Progression <i>Presentation and Group Discussion moderated by Kristin Lewis, Volpe:</i>
3:10 – 3:30 p.m.	Break
3:30 – 5:00 p.m.	Life Cycle GHG Emissions <i>Presentation and Group Discussion, including feedback from Monday's Environment Team Workshop, moderated by Jim Hileman, FAA</i>
5:00 – 5:30 p.m.	Next Steps and Closing Remarks , <i>Nancy Young, A4A</i>

Cert/Qual Team Breakout Session, Tuesday, January 28, 2014

Time	Session Title/Description
Session 1: Pathway Approval	
<i>Notes:</i>	
1. Pathway presentations are to be one slide covering process overview and timeline of progress	
2. If any particular pathway is unavailable, can either lengthen time slots or substitute "co-processing" pathway.	
2:00 – 2:10 p.m.	Introductions: A brief overview by Mark Rumizen, FAA
2:10 - 2:20 p.m.	FT-SKA: Cliff Moses
2:20 - 2:30 p.m.	DSHC: Amyris
2:30 - 2:40 p.m.	ATJ: GEVO
2:40 - 2:50 p.m.	HDCJ: KiOR
2:50 - 3:00 p.m.	SK & SAK: Virent
3:00 - 3:10 p.m.	CH: ARA
3:10 – 3:30 p.m.	Break
Session 2: Challenges, Lessons Learned, Process Improvements	
<i>Notes:</i>	
1. OEM Review Panel and FAA CLEEN II & COE presentations intended to provide background on concepts being discussed to improve process to help round table discussion that follows.	
2. Round Table Discussion is intended to highlight challenges and lessons learned from pathways as they progress through ASTM D4054 process.	
3:30 - 3:40 p.m.	OEM Review Panel Proposal: George Wilson, SWRI
3:40 - 3:50 p.m.	FAA CLEEN II & COE Concepts: Mark Rumizen
3:50 - 4:30 p.m.	Round Table Discussion – Pathways: Moderated by Mark Rumizen
4:30 - 4:50 p.m.	Q & A From Audience:
4:50 - 5:20 p.m.	Go-Forward Discussion/Recommendations: Mark Rumizen
5:20 - 5:30 p.m.	Conclusions: Mark Rumizen

Business

Business Team Breakout Session, Tuesday, January 28, 2014

Time	Session Title/Description
2:00 – 2:10 p.m.	<p>Opening Remarks and Introductions</p> <p><i>Breakout will consist of moderated, open discussions around several identified challenges and gaps.</i></p> <p><i>John Heimlich, A4A; Bruno Miller, Metron; Brock Carlson, Fedex</i></p>
2:10 – 3:10 p.m.	<p>Finance: <i>Building off the dialogue of the just-completed plenary panel.</i></p> <ul style="list-style-type: none"> ○ Risk Reduction
3:10 – 3:30 p.m.	Break
3:30 – 5:10 p.m.	<p>Logistics</p> <ul style="list-style-type: none"> ○ Blending Topics <ul style="list-style-type: none"> • <i>Trade-offs of blending on-site at the production facility or closer to the consumption point (airport)</i> • <i>Practical considerations for handling alternative fuel</i> ○ Storage Topics <ul style="list-style-type: none"> • <i>Co-mingling of alternative and conventional fuel</i> • <i>Co-mingling different types of alternative fuel</i> <p>Tracking the “green” molecule</p> <ul style="list-style-type: none"> ○ <i>How to balance the economic benefits of comingled storage vs the marketing value of segregated storage?</i>
5:10 – 5:30 p.m.	<p>Future Directions Discussion: Challenges and Gaps</p> <p><i>What is missing, what should be prioritized?</i></p> <ul style="list-style-type: none"> ○ Communications & Marketing <ul style="list-style-type: none"> • <i>Can external communications be used to strengthen projects for all stakeholders? How?</i>