CAAFI Biennial General Meeting 2016

R&D Team Breakout Session – Report Out

Walter E. Washington Convention Center Washington, D.C.

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R&D Team: What we do

* Identifying technology gaps

- Broad range of participants/experts
- * White Paper solicitation/review

* Aligning research focus/funding for future fuel development

- * Coordinating efforts with FAA, DOE, DOD, and OEMs to maximize impact
- Ensuring availability of research findings

Developing Tools and communication frameworks

- Feedstock Readiness Level (FSRL)
- * Path to Fuel Readiness Guide
- Fuel Readiness Level (FRL) Exit Criteria
- Roadmap Tool
- * SOAP-Jet Webinar Series



Breakout Breakout

- * Sought input from participants on key R+D challenges/opportunities across the supply chain
- * Sought input on how CAAFI R+D team can be effective in providing value
- * Broke into two groups:
 - Conversion Technology and Cross-Cutting Analysis
 - * Feedstocks and Supply Chain Logistics



Findings – Conversion and Cross-Cutting

- * Ten years in, 1st round of technology success.
 - * What is the future? What's the NextGen?
- * CAAFI to help community focus on outcomes, not processes.
 - * Advocate programs/policies that are not prescriptive.
 - Help define challenging, but flexible outcomes environmental and fuel performance
- * CAAFI to promote evaluative tools to explore options/ conversion pathways.
 - * More "physics-based" process agnostic
 - Capable of prioritize prospects of different technologies and likelihood of producing jet fuel

31 October 2016

Findings – Conversion and Cross-Cutting

- CAAFI to continue to advocate SAJF supportive policies –
 "no such thing as a free market"
 - Policies guide types of research
 - Evaluative tools are needed to guide advocacy
 - * Policies should not be locked into a certain type or process
 - Evaluative tools can help set outcome goals
 - Policies should be informed by 'systems thinking'



Findings – Feedstocks and Logistics

- CAAFI R&D Team to advocate supply chain adaptations for fuel
 - * Food practices (high density commodities) don't necessarily fit energy feedstock practices (low density)
 - Feedstock consolidation processes
 - Scale out vs scale up / modularity
 - * Coordinated supply chain management
- CAAFI to advocate continued feedstock identification
 - * Initial efforts from USDA/universities require continued funding
 - * Continued outreach to farmers
 - * NextGen Feedstocks



R+D Team – Additional Thoughts

- Expand CAAFI networking
 - CAAFI and the alt fuels community outreach
 - * Use communication tools more effectively
 - * CAAFI Communications Manager
 - Website tools/resources
 - * SOAP-Jet
 - * Meetings
 - * Social Media
 - * Etc.
 - R&D start dialog with emerging companies/technologies



31 October 2016 7



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