



R&D Team Workshop November 28/29, 2012

Meeting Fact Sheet

CAAIFI R&D Workshop Clarifies Stakeholder R&D Investment Needs and Priorities

The CAAIFI R&D Team held a very successful Workshop in Arlington, VA on November 28/29, 2012, including panel and open member discussions of critical technology gaps and industry opportunities that would, if addressed facilitate the development of cheaper, more scalable production of alternative aviation fuels.

Over the past year, the team developed a series of brief white papers addressing key topics proposed by the members. Each paper was discussed in detail at the workshop through presented material and discussion. Panelists were invited to present their views on the white paper topics and any other challenges they deemed critical. The white paper topics were:

- 1) Efficient conversion of waste to advanced alternative fuels
- 2) Diversity-focused biofuel feedstock production
- 3) HEFA Feedstock costs
- 4) Relative economics of alternative jet fuel compared to other fuels
- 5) Alternative methods of CO₂ capture
- 6) Alternative methods of conversion of CO₂ to fuels
- 7) Alternative jet fuel testing and specifications
- 8) Alternative jet fuel cost of production

At the end of the meeting the participants provided input that resulted in a prioritization of nearer- versus further-term priorities for R&D investment. These results will be incorporated into a CAAIFI R&D position paper.

Meeting Highlights:

The “Perspectives” panel provided insights from industry experts with a broad perspective on past and present alternative fuel production challenges. Panelists were: Joanna Bauldrey (Shell), Harry Baumes (USDA), John Holladay (Pacific Northwest National Lab), Tammy Klein (Hart Energy), and Melanie Thom (Baere Aerospace).

The “Fundings” panel provided overviews of their respective agencies’ funding priorities in the alternative fuels space and whether/how their missions overlapped with the topics proposed by the R&D team as key challenges. The moderator also solicited their additional suggestions on

topics to be addressed. Panelists were: Barbara Esker (NASA), Zia Haq (DOE), James Hileman (FAA), Rick Kamin (Navy), Pramod Khargonekar (ARPA-E), and Tim Edwards (AFRL).

Outcomes:

The discussion and prioritization process led to a reorganization of Topic 2 into two areas (microbial or algal culture diversity and terrestrial crop diversity). The members also identified which papers present near term opportunities, emphasizing the need to address drivers of fuel costs, but also taking into account the need for immediate and long-term development of new feedstocks and processing options. The team identified feedstock and process flexibility as key features of a successfully scaled-up alternative fuel industry.

Next Steps:

The R&D leadership will draft a CAAFI position paper for team review and input. Upon finalization, the position paper will then be available for CAAFI leadership use in describing CAAFI's goals to other entities, and for member use as a communication tool.

CAAFI sponsors are the U.S. Federal Aviation Administration, Airlines for America (A4A), Aerospace Industries Association (AIA) and Airports Council International-North America (ACI-NA). Additional information on CAAFI can be found at our website: <http://www.caafi.org>.