



2014 General Meeting Environment Team Breakout Session (Jan 28)

CAAFI® Environment Team revisits the sustainability documents, introduces the life cycle greenhouse gas analysis (GHG LCA) Issue Matrix, and commits to next steps

The CAAFI Environment Team convened for a 3-hour breakout session on Day 1 of the 2014 General Meeting. Over the course of the afternoon, the team reviewed progress to date, revisited the recently released sustainability documents, and engaged in active discussion about the sustainability documents and life cycle greenhouse gas analysis (GHG LCA). The team concluded the session by identifying a set of action items moving forward.

Session Highlights:

Environment Team Co-lead Nancy Young kicked off the breakout session with a review of the team objectives and progress. The team was reminded of the imperative to seek out the environmental benefits of alternative aviation fuel deployment and to avoid inducing environmental harm. Preparing the group for the conversation ahead, Nancy also summarized GHG LCA developments for aviation application and modeling.

Narrowing in on the CAAFI materials referenced in Nancy Young's review of team progress, CAAFI Head Research and Technical Advisor Kristin Lewis summarized CAAFI's recent sustainability tools—the *Environmental Sustainability Overview* and the *Environmental Progression*—and sought team input. The session attendees discussed both documents, particularly focusing on the utility and content of the Impact Matrix presented as part of the Sustainability document and concurred that it provides useful insight on how to focus attention on environmental risks.

Wrapping up the breakout session, Environment Team Co-lead Jim Hileman shifted the focus to GHG LCA. Jim summarized the CAAFI Environment Team workshop on GHG LCA that had taken place the day before the General Meeting, the aim of which was to identify contributors to differences between GHG LCA performed under different regulatory regimes and tools. MIT's Robert Malina was invited to present research undertaken by MIT and Argonne National Laboratory that had been a key focus of the workshop. Jim Hileman then introduced the group to the GHG LCA Issue Matrix, which sets forth the key elements considered in GHG LCA for alternative aviation fuels and provides means for reflecting significant differences across methods and tools. The Environment Team delved into the GHG LCA Issue Matrix and concluded the session with a lively discussion. While country-specific and regulation-specific

approaches to GHG LCA for alternative aviation fuels are the norm, increasing interest in the use of alternative aviation fuels in international flight makes identifying and understanding differences among methods and tools more important.

Outcomes:

The team confirmed that the sustainability documents are helpful for the development and deployment of alternative aviation fuels. Upon review of the documents, the team agreed to treat the materials as dynamic, reflecting the most up-to-date information on the topic and gathering input to improve utility.

The GHG LCA presentation and subsequent discussion clarified the needs required for developing a more consistent understanding of the various methods and tools used GHG LCA as applied to alternative aviation fuels. The Argonne National Lab/MIT presentation provided particular insight into the GHG LCA results from European and U.S. regulations and tools. Attendees agreed that the GHG LCA Issue Matrix is a helpful means for setting forth the key elements of GHG LCA, probing material differences among analyses, and providing advice and input for further populating the matrix.

Next Steps:

Continuing the conversations that emerged during the breakout session, the Environment Team will further refine the GHG LCA Issue Matrix, soliciting input from experts to arrive at a prioritized list of key elements and material differences. The Environment Team leaders will incorporate suggestions brought up at the breakout session into the sustainability documents. In response to the enthusiasm for another meeting, the team will plan to hold a 1.5-day Environment Team meeting and workshop in early 2015.

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>.