



## A Note from the Executive Director

This CAAFI Quarterly newsletter describes the CAAFI activities that occurred April through June 2022. In this issue, we share industry updates and CAAFI team accomplishments. Much of our time in the quarter was dedicated to planning and execution of the 2022 CBGM. By all accounts we were successful in the targeted communications and in making connections for people new to the SAF space. I'd like to publicly thank the CAAFI team, and all the CBGM participants and speakers, because you made the meeting the success that it was.

I don't have any key deliverable items requiring your attention for the third quarter. Those of you who have been encouraged to solicit full proposals to USDA and DOE are aware of your deadlines. We do soon expect to hear from USDA and DOE on some additional grant awards, and kickoffs of some new project efforts. We also expect to see the public release of the SAF Grand Challenge Roadmap in September. This is likely to come just prior to the start of the ICAO Assembly meeting starting on 27Sep, where we expect to hear more about agreement on a long-term goal related to aviation carbon emissions.

We appreciate questions, comments, and suggestions at any time. Enjoy!

*Steve Csonka and the CAAFI Team*

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## Quick Links

- ⇒ Check out "[What's New](#)" for a brief review of noteworthy SAF news from the last quarter, including funding opportunities.
- ⇒ Go to "[Ask CAAFI](#)", a segment that highlights and explains relevant topics that impact the SAF industry.
- ⇒ See "[CAAFI Team Highlights](#)" for a snapshot of CAAFI work teams' projects and progress last quarter.
- ⇒ Jump to "[SAF State and Regional Efforts](#)" for a summary of select deployment projects around the United States.

## What's New?

We are now seeing a significant rate increase on the number of offtake and commercialization announcements, as well as engagement from new producers. Following are a couple of the more significant announcements, but many more can be found (e.g. Biofuels Digest, Biofuels International, GreenAir Online, ...).

[Gevo and Delta Signed Offtake Agreement for More than 500 Million Gallons](#)

[Aemetis Announced SAF Offtake Agreement with Finnair](#)

[British Airways and Phillips 66 Signed SAF Agreement](#)

[Shell Committed to Increase SAF Procurement with 10-year Supply Deals](#)

[Chevron Purchased Renewable Energy Group \(REG\)](#)

[Avfuel Agreed to Purchase 1 Billion Gallons of SAF over 20 Years from Alder Fuels](#)

[Memo from USDA Secretary Addresses Potential of Wood-based SAF](#)

*Additional information on these news items and additional funding opportunities can be found at [caafi.org](http://caafi.org).*

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## Ask CAAFI

**Question:** What happened at the 2022 CBGM?

**Answer:** There's more attention on SAF now than ever before. There's also a lot going on in the SAF space from near-term commercialization, policy pushes, feedstock development, pathway approvals, airline, airport and business aviation engagement, etc. A major focus is the U.S. SAF Grand Challenge with its targets of 3 billion gallons of SAF per year by 2030 and 35 billion gallons per year by 2050. We heard from industry leaders, subject matter experts and government agency leadership on the topics that matter most to decarbonizing the aviation sector and how we will achieve the ambitious goals of the Grand Challenge.

Links to recordings of the sessions as well as the presentations can be found [here](#).

As always, we welcome your feedback and/or comments. We did hear from some producers about the need for perhaps convening a finance summit for the SAF industry, and we are exploring such with some of our major partners.

### CAAFI Team Highlights

CAAFI hosted a [webinar](#) highlighting the USDA Sustainable Agriculture Systems Funding Opportunity presented by Kevin Kephart.

⇒ The presentation is available [here](#).

⇒ A recording of the webinar is available [here](#).

Going forward, CAAFI participants should also expect to see some changes to CAAFI's operations, teams, and guidance documents based on all that is happening with the Grand Challenge, policy support, and commercialization progress – stay tuned.

### Business —

New producers, new suppliers, new customers, and many adjacent participants continue to contact us for guidance and assistance (now on a weekly basis) or asking for introductions to others who can assist with their commercialization efforts. We are very pleased to see this continued level of engagement from the previous quarter, and to help many! We would like to remind any producer of this available resource document: [Guidance for Selling Alternative Fuels to Airlines](#). Additional tools can be found [here](#):

### Certification/Qualification —

The work of the Cert/Qual team is aligned with the activities of ASTM's aviation fuel subcommittee, the [Aviation Technical Committee of the Coordinating Research Council \(CRC\)](#), and the National Jet Fuel Combustion Program. [It is supported by](#) periodic OEM meetings in the US and UK and various ASCENT projects. The qualification process is described in a recently issued paper "[Qualification of Alternative Jet Fuels](#)". This paper may be found at the Frontiers in Energy Research Sustainable Aviation Fuels "Research Topic."

Things continued to unfold in an active way at the June ASTM Meeting in Seattle on 27-30 June. ASTM D4054 updates include:

- The chair of the Synthetic Aviation Turbine Fuel (SATF) ASTM section has transitioned from Mark Rumizen (FAA) to Gurhan Andac (GE). Mark will now take over as chair of the aviation fuel subcommittee at ASTM.

⇒ Swedish Biofuels is in process of conducting some additional testing in response to the OEM comments. They should be able to finalize their Phase 1 research report soon after completion of the testing, and hopefully it will be ready for ASTM balloting before the June ASTM meeting.

⇒ Global BioEnergies has completed D4054 testing and their research report review with the OEMs. They are incorporating OEM comments and expect to issue their research report for final OEM review and approval in August. ASTM balloting of the D7566 revisions and the research report will occur after that.

⇒ The recent interest in unblended, or 100% SAF has reenergized the Virent SAK D4054 effort. Virent SAK is a pure aromatic stream that when blended with other SPKs such as FT or HEFA will result in a fully formulated fuel. Virent has worked with the OEMs to define the remaining qualification tasks and is now conducting the final round of testing.

⇒ Shell IH2: Shell has finalized their D4054 Tier 3 & 4 test plan with the OEMs and is now working with the OEMs to identify test facilities. Shell is also working on scaling up production to supply the necessary quantities of test fuel to conduct the testing.

⇒ CSIR – Indian Institute of Petroleum has provided another fuel sample for Tier 1 and 2 fuel property testing.

OMV Downstream GmbH presented preliminary fuel property data at the CRC aviation fuel committee meeting in May and at the ASTM aviation fuel subcommittee meeting in June. ASTM approved the formation of a task group to work on evaluating this new conversion pathway.

An ASTM task force is continuing its work to develop specification criteria for an unblended (or 100%)

alternative jet fuel. The basic format has been finalized but we are still sorting out one remaining property requirement. It is expected that this effort will take some time before the draft D7566 specification revisions are ready for balloting to the ASTM aviation fuel subcommittee.

We continued to see increased engagement from petroleum refiners and suppliers who are interested in increasing the types and maximum blend levels for SAF co-processing at existing refinery installations. ASTM task forces have been established to develop specification criteria for co-processing of hydroprocessed biomass (or HVO), pyrolysis oil derived from discarded tires, and to increase the current approved 5% limit on co-processing of lipids feedstock to 30%. The co-processing of hydroprocessed biomass task group has already gone to ballot twice and is working to reach agreement with the ASTM members and OEMs. Note that these specification provisions will be incorporated into the ASTM D1655 conventional jet fuel specification upon approval.

### Sustainability —

Most of the effort and focus of the Sustainability team continued to support deliberations of ICAO and its work on CORSIA.

- ⇒ Continued participation in the LCA, sustainability and alternative fuels tracking work in the ICAO CAEP Fuels Task Group (FTG), Working Group 4 (CORSIA), and Sustainability Certification Scheme Evaluation Group (SCSEG).
- ⇒ ICAO has a [set of sustainability criteria](#) available covering the pilot and voluntary phases.

### R&D —

⇒ The team continued hosting a [webinar series](#) spotlighting the SAF work being done at U.S. Department of Energy's National Labs and Bioenergy Centers, among other topics. Stay tuned for announcements on upcoming webinars.

Feel free to reach out to [Josh Heyne](#) if you have interest in fuel screening efforts.

## State and Regional Projects

CAAFI principals continue to participate in and foster regional development activity, on feedstocks, supply chain analysis & establishment, and with various entities. Stay tuned for an update from ASCENT on ways that they can work with customers to provide keys insights and analysis.

*If you are aware of other scenarios that could be appropriate for a regional development effort, please let us know. For more information, see CAAFI's [State Initiatives](#) page.*

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*Please check the [CAAFI website](#) on a regular basis for more detail on pending activities.*

*Email [peter.herzig@dot.gov](mailto:peter.herzig@dot.gov) with any ideas for CAAFI Quarterly items of interest, caafi.org news suggestions, or inquiries about subscription to the CAAFI Membership group.*