



The CAAFI Quarterly

Q1 2021

A Note from the Executive Director

This [CAAFI Quarterly](#) newsletter describes the CAAFI activities and events that occurred January through March 2021. In this issue, we share industry updates and CAAFI team accomplishments. As a reminder, we hope you will join us for our virtual CAAFI meeting taking place June 1-3, 2021. I also want to make sure you are aware of the following upcoming items:

- [ABLC Digital, 3-7 May](#)
- [Jacobsen Conference, May, Denver, CO](#)
- IATA Fuels Week, 7-10 June
- BIO International Convention Digital, 10-11 & 14-17 June

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

Steve Csonka and the CAAFI Team

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/SAJF 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?

[CAAFI’s Executive Director Provides Testimony to House Subcommittee](#)

[Case Study Launched to Show Potential of Blockchain for Biofuel Traceability](#)

[UK Launches Competition to Develop SAF Technology](#)

[First Ever In-Flight SAF Emissions Study on Passenger Jet](#)

[Ryanair to Support Sustainable Aviation Fuel](#)

[Delta Commits \\$30 Million to Offset 2020 Climate Impact](#)

[American Airlines and Kuehne+Nagel Reach Agreement for Carbon Reduction Benefit](#)

[NGOs and Airlines Press for Long-Haul Emissions to be Covered in EU’s SAF Mandate](#)

[ECB Group Signs Contracts for Biofuel Purchase and Sustainable Material Supply](#)

[Neste Plans to Build Biofuel Refinery in Rotterdam](#)

[Air Canada to Invest \\$50 Million in Sustainable Aviation Fuel](#)

[FedEx Commits to Becoming Carbon-Neutral by 2040](#)

[Velocys and Toyo Agree to Produce SAF in Japan](#)

[U.S. DOT and Transport Canada Release Joint Statement on Transportation and Climate Change](#)

[Deloitte’s New Partnerships Aim to Reduce Air Travel Emissions](#)

[Finnair and Fintraffic ANS to Track Emissions and Expand SAF Use](#)

[Airlines Seek White House Support for SAF](#)

[Two FBOs in California Make SAF Permanent Supply](#)

[EBAA Held First European Business Aviation SAF Summit](#)

[Qantas and bp Partner with Shared Net-Zero Goals](#)

[NetJets, WasteFuel, and Prime Infra to Build SAF Facility in Manila](#)

[Air France and KLM Launched New Sustainable Aviation Fuel Program](#)

[Gevo Announced Net-Zero Projects](#)

[Proposed Clean Fuel Regulations for Canada](#)

[Oxford University Made Jet Fuel from CO2](#)

[AIN Announced Winners of Top Flight Awards](#)

[Researchers Use New Technology to Develop Drop-in Fuels from Biowaste](#)

[Shell to Supply DHL with SAF](#)

[France Considering Implementing 2% SAF Blending from 2025](#)

[Fueling Flight Initiative Encourages New SAF Targets for 2021](#)

Additional information on these news items and additional funding opportunities can be found at caafi.org.

Ask CAAFI

Question: What to expect from the 2021 CAAFI Virtual SAF Mini-Symposium?

Answer: The CAAFI Virtual Mini-Symposium is being designed to target the interests of the CAAFI membership. The event will be held Tuesday, June 1st through Thursday, June 3rd from 10am-1pm Eastern each of the three days. This mini-symposium is intended to provide you with a comprehensive overview of the status of SAF development and commercialization, including spotlighting current SAF producers and commercialization activities, perspectives from fuel users, and select updates from international and other key SAF activities. We hope you'll plan to join us!

Look for more details from us in your inbox in the coming weeks.

CAAFI Team Highlights

CAAFI hosted the following two webinars during this reporting period:

⇒ [International Activities Supporting SAF Development](#) with presentations on Implementation of CORSIA In the U.S. by Dan Williams (FAA), Voluntary Carbon Exchanges and IATA ACE from

Michael Schneider (IATA) and the Waypoint 2050 project by Philippe Bonnefoy from BlueSky.

⇒ [Hydro-thermal Liquefaction \(HTL\) for SAF – State of Technology and Research Needs](#) from Jonathan Holladay (PNNL) and Zia Haq (DOE).

Business —

Activities include:

⇒ Facilitating opportunities for airline and other end user engagement, identifying supply logistics needs and informing contract processes. Stay tuned for additional announcements in the coming quarters.

⇒ Engaging with several firms approaching commercialization, as well as several new producer entrants. CAAFI continues to introduce potential new SAF producers to both fuel suppliers and end users across the civil aviation space.

⇒ Continued engagement with the several USDA NIFA-AFRI CAPS with whom CAAFI has strategic engagement: [SPARC](#), [SBAR](#), and [IPREFER](#). CAAFI engaged with several firms for collaboration on upcoming DOE and USDA funding opportunities

⇒ Engagement with the OEM and BizAv communities on industry messaging.

⇒ Responding to inquiries from policy makers and other third parties interested in fostering SAF development.

Certification/Qualification —

The detailed work of the Cert/Qual team typically happens at the two annual meetings of [ASTM D02](#), the spring meeting of the [Aviation Committee of the Coordinating Research Council](#), various OEM meetings in the US and UK, and adjacent to the activities of ASCENT, and at venues like the National Jet Fuel Combustion Program.

D4054 updates include:

⇒ The UK Department of Transport (DfT) has allocated funding for the establishment of a UK D4054 Clearinghouse to support testing of candidate SAFs aligned with UK projects. In addition, the European Union Aviation Safety Agency (EASA) has published the European SAF Facilitation Initiative to potentially define testing

support for the on-going ReFuelEU Aviation initiative. Both of these initiatives should provide well-needed testing support for candidate SAFs worldwide.

- ⇒ Shell IH2: Shell is developing a D4054 Tier 3 & 4 test plan for the OEMs to review. Once that is finalized, Shell will work the OEMs to identify test facilities and on producing the necessary quantities of test fuel to conduct the testing.
- ⇒ Swedish Biofuels has reviewed the results of their final D4054 Tier 2 with the OEMs and is now finalizing their Phase 1 research report.
- ⇒ Global BioEnergies has been working with the D4054 Clearinghouse and other European labs to conduct D4054 Tier 1 and Tier 2 testing. Initial data has been generated and is undergoing preliminary evaluation.
- ⇒ CSIR – Indian Institute of Petroleum has completed their initial round of Tier 1 and 2 fuel property testing and is reviewing the results to determine the next steps.

Other companies that have initiated contact with the ASTM OEM team and have shared preliminary data include REVO International, and OMV Downstream GmbH.

Sustainability —

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

- ⇒ Continued to participate 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).

R&D —

- ⇒ Continued discussing engaging companies with emerging alternative jet fuel pathways.
- ⇒ Continued developing enhanced prescreening guidance documents.
- ⇒ Working on a document detailing the questions that need to be addressed to achieve 100% Sustainable Aviation Fuels.

SAF State and Regional Efforts

◇ Southeast Regional Efforts

- CAAFI is working with an entity in South Georgia to help develop a Bioeconomy Development Opportunity Zone for their project location along with introducing them to potential offtakers. They will be using wood waste feedstocks from sawmills and foresters.
- An entity in South Carolina reached out for CAAFI's support in supply chain development. We introduced them to a potential supplier of tall oil products as well as a potential investment and blending partner.

◇ Hawaii

- The State of Hawaii Legislature is considering two bills to facilitate the production of SAF: 1) [HB327](#) Creation of a Sustainable Aviation Task Force, and 2) [HB 683](#) Matching funding program for Hawaii-based low-greenhouse gas fuel manufacturers through the state's Hawaii Technology Development Corporation.
- Simonpietri Enterprises LLC (SE) announced they have completed the engineering feasibility study for the [Aloha Carbon](#) construction and demolition debris waste-to-fuel technology for their Hawaii project with the multinational engineering firm Wood PLC of Houston TX, and completed the first waste gasification trials with Gas Technology Institute of Des Plaines, IL. The gasification trials were funded in [part by a contract from the US National Institute of Food and Agriculture's](#) Small Business Innovation Research (SBIR) Program. A second round of gasification trials starting next quarter and focused on environmental performance of the Aloha Carbon process is [funded by a contract from the US Environmental Protection Agency](#).

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.

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

Email 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.