Climate Ambition Takes Flight: Companies and Airlines at the Forefront of Sustainable Aviation Fuels
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Senior Director, Net Zero Fuels, ENGIE Impact
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SABA Members

Customers

Aviators
SABA’s mission is to accelerate the path to net zero aviation by pursuing 3 key objectives

**Expand SAF Investment Opportunity**
- Establish a credible, transparent SAF certificate system
- Aggregate member demand and run collective procurement
- Develop a SAF Sustainability Framework to guide members to high quality SAF

**Provide Education & Policy Support**
- Educate members and the broader public about SAF
- Support members as they navigate the SAF market
- Help members understand and advocate for appropriate SAF policy

**Accelerate Technology Innovation**
- Assess emerging SAF technologies
- Work with like-minded organizations to help address barriers to scale and cost reduction
- Catalyze new technology demonstration
Our focus in 2022: Expanding the SAF investment opportunity

**SUSTAINABILITY FRAMEWORK**
Supporting buyers to invest in high integrity SAF and prevent unintended environmental consequences

**SAF CERTIFICATE REGISTRY**
A SAF certificate registry that allows buyers to make transparent emission reduction claims related to their SAF investment

**ACCOUNTING GUIDANCE**
In collaboration with WEF CST, guidance on how to measure and report aviation emissions involving SAF

**DEMAND AGGREGATION**
Competitive, collective procurement to standardize and simplify the procurement process for companies
Key outcomes to date

- Collaborated with standard-setting organization RSB on their SAF book-and-claim standard
- Design and in the process of building a universal SAF certificate registry, to be ready for piloting by early 2023
- Collaborated on SAF certificate accounting guidance with WEF Clean Skies for Tomorrow, published in October
- Adopted SABA's SAF Sustainability Framework and will publicly release it in December
- Aggregated member demand and ran the first-ever collective SAF certificate procurement
- Expanded access to the benefits of SABA through new membership types and discounts for some companies
Istvan Bart
Director, Global Climate, EDF (SABA Team)

Laura Hutchinson
Manager, Climate-Aligned Industries, RMI (SABA Team)
SAFc Registry
SABA is building a SAF Certificate Registry with support of Energy Web.

<table>
<thead>
<tr>
<th>The SAFc registry will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create a standardized framework for registering, trading and retiring SAF certificates (consistency)</td>
</tr>
<tr>
<td>2. Provide detailed data on sustainability attributes of each batch of fuel, e.g. emissions abatement, feedstock, certifications, etc. (sustainability)</td>
</tr>
<tr>
<td>3. Ensure that claims are only made once for every ton of SAF (no double counting)</td>
</tr>
<tr>
<td>4. Provide a transparent ledger to support climate disclosure of SAF claims by air transport providers and corporations (transparency)</td>
</tr>
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</table>
## SAFc Registry Basics

<table>
<thead>
<tr>
<th>Users</th>
<th>Units</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Providers</td>
<td>SAFC</td>
<td>✅ Issue</td>
</tr>
<tr>
<td></td>
<td>Sustainable Aviation Fuel Certificate</td>
<td>✅ Transfer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✅ Retire</td>
</tr>
<tr>
<td>Air Transport Providers</td>
<td>SERC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAF End-user Reduction Claim</td>
<td></td>
</tr>
<tr>
<td>Corporate consumers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>passenger travel and freight</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Issuing, trading and retiring in the SAFC registry

(main sequence)

ISSUANCE

SAFC held by fuel provider

TRANSFER

SAFC held by airline

RETRIEVAL

SAFC retired

ISSUANCE

SERC held by corporation

TRADE (OPTIONAL)

Check if voluntary?

ISSUANCE

SERC retired

TRADE (OPTIONAL)
### Account holdings

#### All SAFC and SERC

<table>
<thead>
<tr>
<th>Unit</th>
<th>Total units</th>
<th>Tonnes CGyl enabled</th>
<th>Expiry date</th>
<th>Associated unit</th>
<th>Audit status</th>
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</thead>
<tbody>
<tr>
<td>SERC</td>
<td>15</td>
<td>45</td>
<td>31-Dec-24</td>
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<td>VAL</td>
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<tr>
<td>SAFC</td>
<td>25</td>
<td>75</td>
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<tr>
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<td>25</td>
<td>75</td>
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<td>VAL</td>
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<tr>
<td>SAFC</td>
<td>105</td>
<td>315</td>
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<tr>
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<td>VER</td>
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<tr>
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<td>57</td>
<td>171</td>
<td>31-Dec-24</td>
<td>Yes</td>
<td>VER</td>
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</table>
Total SAFC units
15 tons
45 tons CO₂e abated

HEFA
Fuel conversion process
CORSIA
Certification

Country code
US
Expiry date
31-Dec-24
SERC Issued
Yes
Audit status
VAL
LCA GHG reduction
22 gCO₂e/MJ
Feedstock
Tallow

Location
New York

Powered by energy web
## Public certificate retirement table

<table>
<thead>
<tr>
<th>Retirement benefactor</th>
<th>Year</th>
<th>Unit type</th>
<th>No. of units retired</th>
<th>Tonnes CO₂e abated</th>
<th>Certification document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline 1</td>
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<td>15</td>
<td>45</td>
<td>CERT000145</td>
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<tr>
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<td>45</td>
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<td>Company B</td>
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<tr>
<td>Company C</td>
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<td>105</td>
<td>CERT000256</td>
</tr>
<tr>
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</table>
Up Next

Public consultation process to open by end 2022, offer opportunity for detailed feedback

Testing by SABA members Q1 2023

Registry available for all users in Q3 2023
Collective Procurement
Collective procurement is intended to serve our members and the broader SAF market

Drastically simplify the process of buying SAF certificates for our members, including by vetting the fuel for quality

Uncover the gaps in market functionality and transparency and work to address them together with our partners

Demonstrate growing demand signal for high quality fuel in order to help grow the market and eventually lower prices
Our first-of-kind joint RFP is nearing completion

**Current Step**

- **Develop scoring criteria**
- **Launch RFP**
- **Award winning bid**
- **Finalize details and contracts**
- **Distribute SAFc**

**Understand Customer Needs**
- Leveraged internal survey to gain insight into customer expectations

**Develop scoring criteria**
- Finalized RFP, including legal review, distributed to airlines

**Launch RFP**
- Evaluated responses and awarded JetBlue with World Energy fuel

**Award winning bid**
- Finalizing certification, registry, and contract details to ensure customers begin receiving SAFc in the coming months.
Lessons learned through this process were invaluable

<table>
<thead>
<tr>
<th>Learnings</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near-term SAF market is tighter than we anticipated</td>
<td>Suggests a future RFP structure that is multi-year or provides more time between request and fuel deliveries</td>
</tr>
<tr>
<td>Sustainability certification status across fuel providers is uneven and, though progressing, less advanced than anticipated</td>
<td>SABA plays key role in guiding the market toward strong, globally accepted certification schemes</td>
</tr>
<tr>
<td>Fuel prices vary widely ($50-800/ton CO₂) but those price differences often say nothing about quality</td>
<td>When airlines signed contracts and whether fuel providers are able or willing to claim subsidies drive price difference today</td>
</tr>
<tr>
<td>Methodology to convert gallons of SAF to tons of CO₂ₑ is not yet fully standardized, leading to 20% price and volume swings</td>
<td>Conversions should be done on a well-to-wake basis, consistent with SBT guidance</td>
</tr>
<tr>
<td>Full SAF chain of custody is complex; not all actors will be equally well-versed on book-and-claim systems</td>
<td>Upfront understanding and alignment among all relevant value chain actors will allow for smoother transactions and avoid unnecessary delays</td>
</tr>
</tbody>
</table>
Our next joint procurement will be more flexible and ambitious

- **Flexible response pathways**
  Targeting fuel providers, but with flexibility to bring innovative partnerships with airlines forward

- **Multi-year structure**
  To send a longer-term signal to the market and give greater certainty to fuels providers

- **Market-relevant demand**
  Total ask TBD, but aiming for a small-to-medium sized plant’s annual capacity

- **Ensuring environmental integrity**
  Leveraging SABA’s recently finalized Sustainability Framework to ensure environmental objectives are met

- **Lowest possible price**
  Exploring potential for volume-based discounts and mechanisms to prevent price swings over multi-year period

*Details are still being developed with input from SABA members. Anticipate releasing RFP in Jan ’23.*
Today’s Panelists:

Adam Klauber  
VP Sustainability & ESG, World Energy

Bas Sudmeijer  
Managing Director & Partner, BCG

Mohamed Al Ghailani  
META Regional Lead for Global Sustainability, Boeing

Moderator: Kim Carnahan
Join Us!

If you are interested in becoming a SABA member, email info@flysaba.org or reach out on flysaba.org