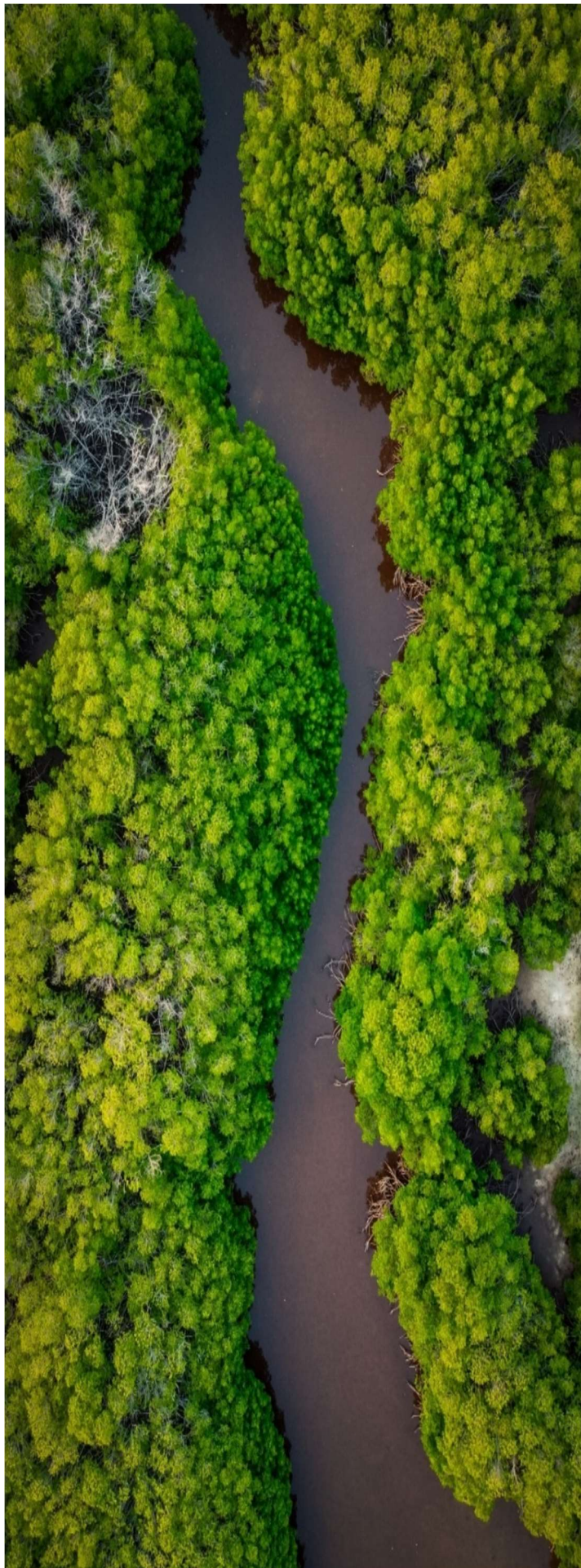


The background of the entire page is an abstract, artistic photograph. It features a dark, almost black, background filled with numerous bubbles of varying sizes. The bubbles are primarily a golden-brown or amber color, with some showing internal reflections and refractions. The lighting creates a sense of depth and movement, with some bubbles appearing larger and more prominent than others. The overall effect is reminiscent of oil droplets in water or a microscopic view of a liquid.

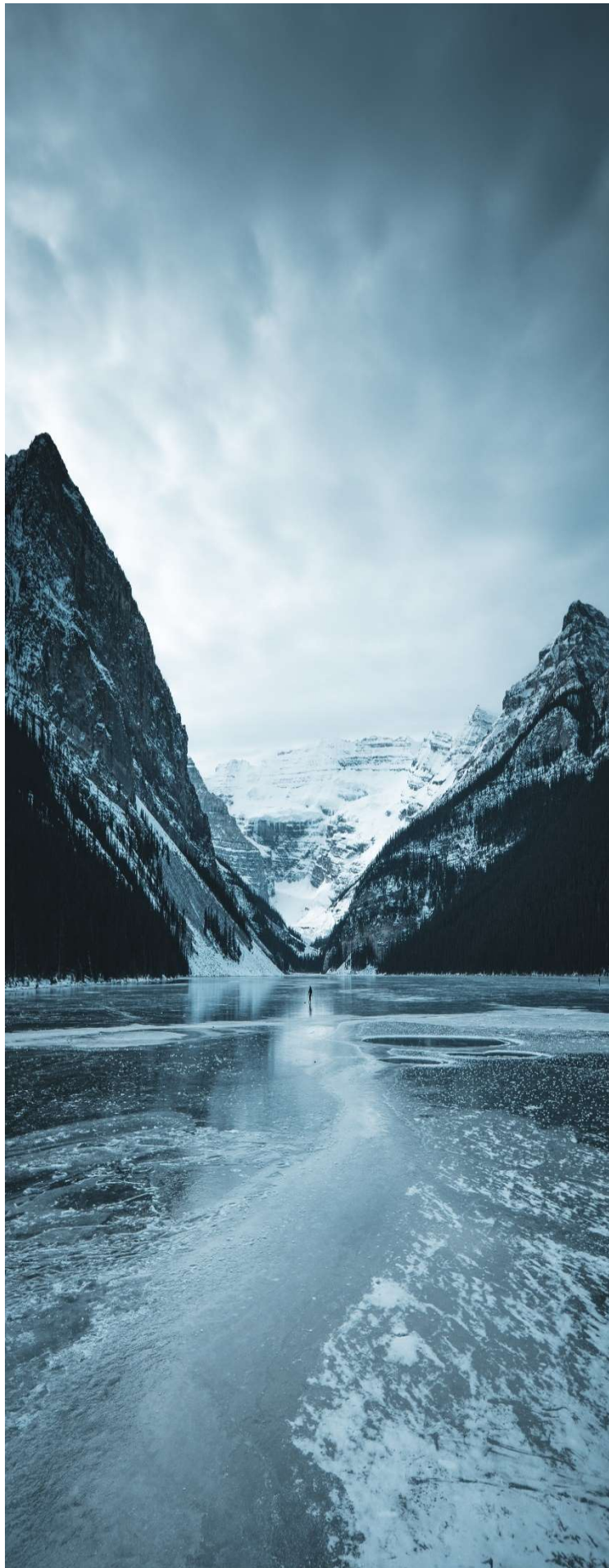
**UNDERSTANDING THE GLOBAL FRAMEWORK OF
SUSTAINABLE AVIATION FUEL (SAF) – A COMPENDIUM
INFINITE BRANCHES – 2023**

PAWEL CZERWNSKI - UNSPLASH



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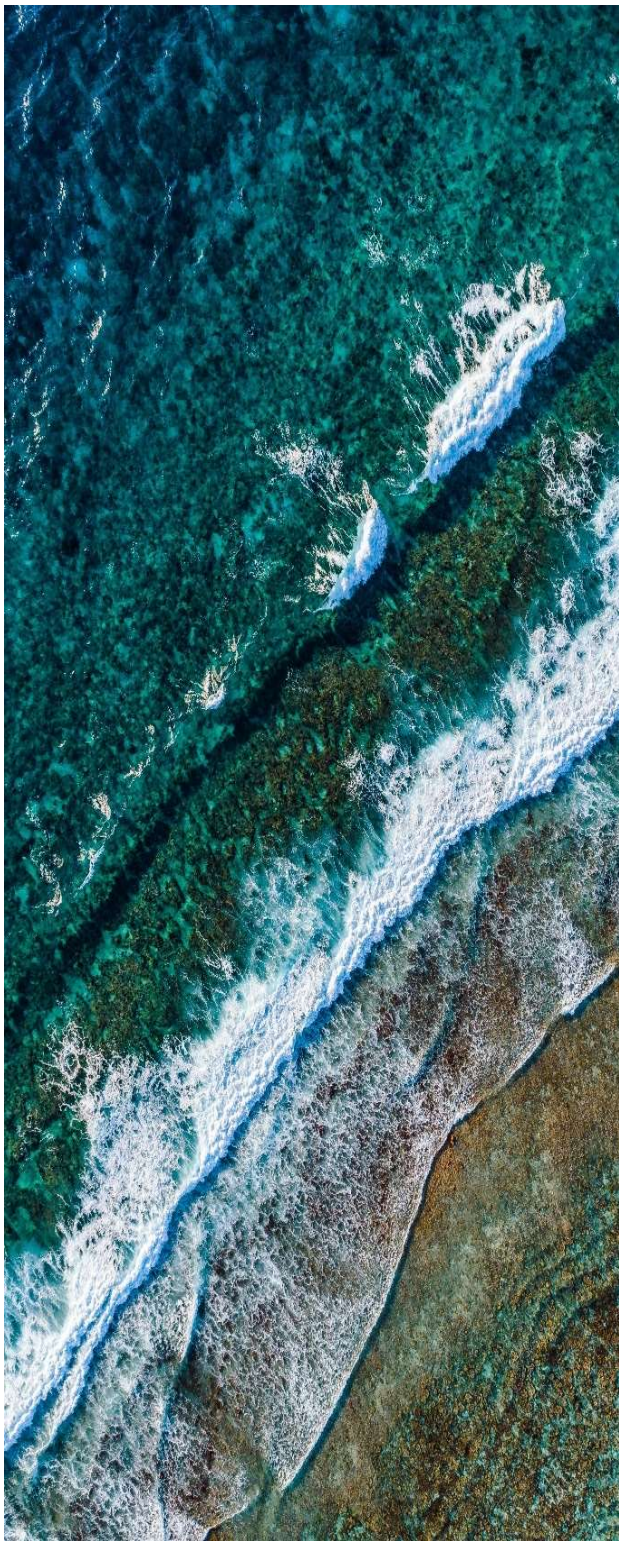
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PREFACE

The reader of this **Compendium** (Merriam Webster's: a collection of things, systematically gathered) will gain a greater understanding of “the whys” and “the hows” of climate change initiatives in order to understand how it impacts the broader aviation industry and ultimately, the business aviation community. The genesis of this discussion resulted from being contacted by an organization that is developing a fund focused on a unique SAF based investment vehicle that sought my authentication for their thesis.

As I reviewed their business model, I realized I needed to learn another language and relied upon my curiosity to take a holistic approach to understanding the framework of global initiatives that address the reversal of carbon emissions first. Throughout my research of the legislation that is underway, I reacted in the same way that I did when I learned about the timeline and the financial impact of not complying with [ADS-B](#) (Automatic Dependent Surveillance–Broadcast.) What I discovered was that SAF is ultimately a part of a much larger issue, which is reducing (and potentially reversing) the impact to the climate change caused by greenhouse gas emissions and one that will cost Trillions of dollars; employ Millions of people, and transform agrarian economies into fuel producers that reduce global dependency on the 20+ core nations that produce petroleum.

This is the first of a two-part series and provides the legal and operational framework for understanding the origins of the global endeavors to reach “net zero” (further defined in the Alphabet Soup of this compendium) by 2050. This encompasses how the legal framework translates into practical use and ultimately how SAF fits into the equation of realizing net zero. The second part is focused on where one might be able to find an avenue to invest in the various opportunities created by the reduction of greenhouse gases and carbon emissions. My introduction to SAF began over four years ago while attending Corporate Jet Investor Miami as I listened to a member of Neste Oyj speak about what SAF is, but did not articulate the greater context for why anyone or any organization should pay a significant premium for the product. Since that time, few members of the business aviation community are purchasing SAF unless it is a larger part of their ESG initiatives.



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This specific compendium summarizes and connects the dots amongst 20+ different white papers (instead of footnotes, hyperlinks enable one to read the source materials); SEC filings, Press Releases, as well as my discussions with members of the aviation community who either use SAF or are devoted to realizing the sustainability initiatives created by the UN. My conversations and correspondence with aircraft management companies, tax advisors, and members of the Boeing’s Sustainability Team, Netflix, and Rolls Royce are further incorporated into this compendium so that the reader can gain a greater understanding of how SAF is viewed from a larger business aviation perspective.

Some of the most relevant sources that piqued my curiosity and led to another train of thought are listed here and often quoted throughout this compendium.

- [Sustainable Aviation Fuel Certificate \(SAFc\) Emissions Accounting and Reporting Guidelines by Client Skies for Tomorrow, the World Economic Forum, RMI, and PwC Netherlands](#)
- [ICAO’s website](#)
- [Sustainable Aviation Buyers Alliance \(SABA\) Website](#)
- [The Biden Administration’s press releases on sustainable aviation fuels](#)
- [Gevo](#) (a publicly traded producer of SAF)’s website, investor deck, and 10-K
- [Air Transportation Action Group \(ATAG\)’s website](#)
- [Environment and Energy Studies Institute \(EESI\)’s four-part series on SAF](#)
- [Sustainable Aero Labs](#)
- [Net Zero Banking Alliance](#)
- [S&P Commodities Trading](#) assessment of SAF country mandates, which remains fluid as more countries adopt their policies and production capacity and their focus on Voluntary Carbon Markets
- [SAF Investor](#) (a Corporate Jet Investor Company)
- [The Royal Society Policy Briefing](#)
- 100 Women in Finance – June 21, 2023 live event Uncovering the Investment Potential in Carbon Markets
- [ICAP 2023](#)
- [Citi Voluntary Carbon Markets](#)
- [Carbon Cap Management LLP](#)
- [Azzera](#)
- [Tenity](#)
- [CommerzVentures 2023 Climate FinTech](#)

My conversations with aviation industry colleagues were enlightening and shows the collaboration that is occurring:

- The flight safety team at Netflix stated that SAF is being used at no added maintenance costs or performance detriments to their aircraft. While it does increase operating costs, SAF is used as part of their commitment to realize net zero. The latter was reiterated by two major FBOs who shared that only one or two clients are regularly purchasing SAF and doing so as part of larger commitment to reducing their corporation’s carbon emissions.
- The Boeing Sustainability Team is working to bridge the proverbial “valleys of death” that are creating roadblocks through their involvement with the [First Movers Coalition](#) and other global consortiums to realizing SAF production goals. This collaboration involves commodities used as feedstock; technology to process SAF; energy sources required for the processing, and financing options to realize production scaling and blending mandates.