

July 2023

Survey: Sustainable aviation fuel financing



Following a series of discussions with finance institutions about the scale-up requirements for sustainable aviation fuels (SAF), ATAG and ICF undertook this short survey to better understand the role of policy in SAF financing decisions. Over 20 major financial institutions took part in the initial survey, with follow-up surveys planned following other discussions in the coming years.

Results

In which geographical area are you focused with respect to SAF?

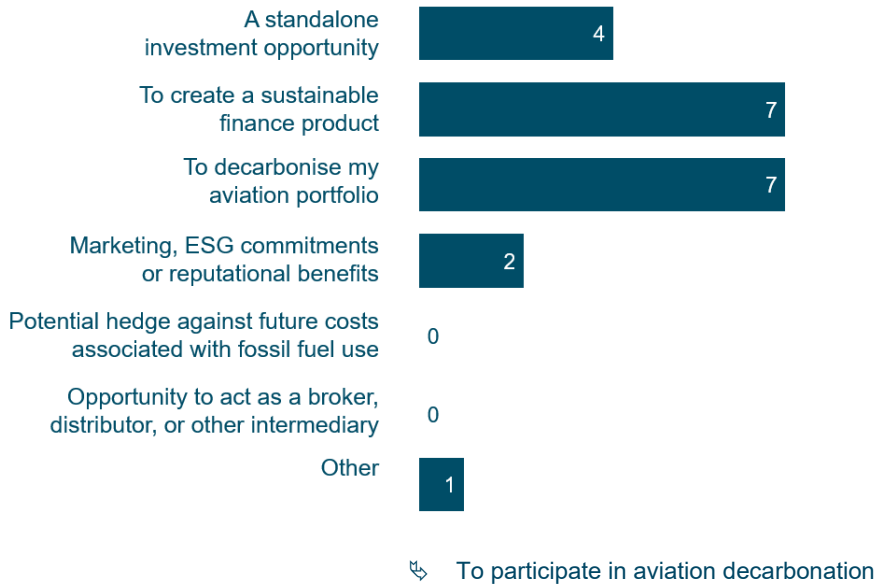
- Europe: 7
- North America: 1
- Europe and North America: 4
- Global: 9
- Other: 0

What is your largest concern with investing in SAF?

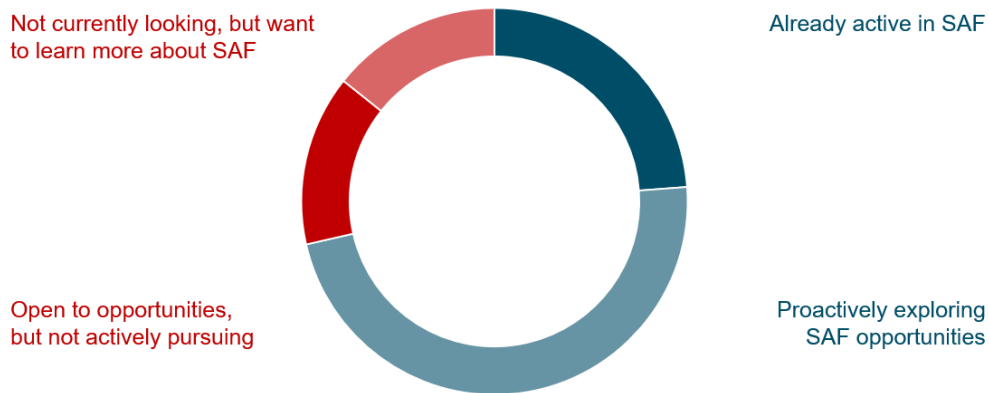


- ✕ All of the above
- ✕ Technical and regulatory risks
- ✕ Cashflow delay – time from investment to SAF delivery
- ✕ Supply chain in combination with regulation
- ✕ All of the above except Market Risk
- ✕ Which SAF process is the right one to finance

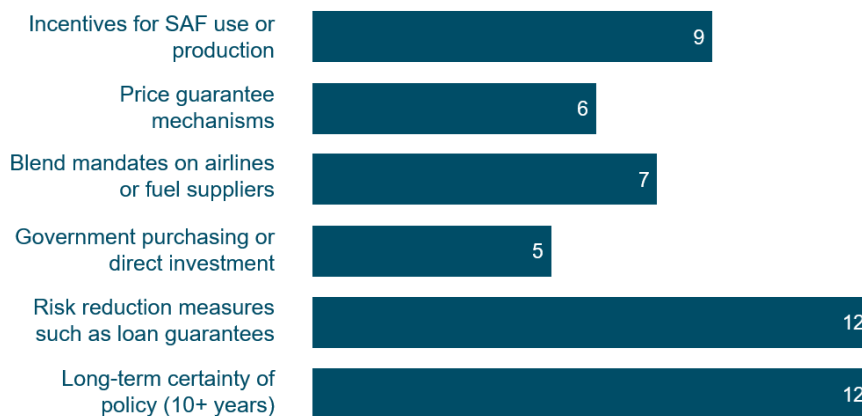
What most incentivises your company to work in the SAF finance space?



What best describes your company's position on sustainable aviation fuels?



What would you most like to see from government policy to help with investment choices?



What are some of the reasons for hesitating over SAF investments today?

Hesitations over investments in SAF stem from several factors, with respondents indicating uncertainties around long-term production, pricing, and feedstock challenges. This is compounded by a market largely driven by early-stage companies, which lack clear regulatory guidance, especially in regions like the UK where Renewable Transport Fuel Obligation (RTFO) policies are changing. Additionally, the market's nascent stage, coupled with the broad diversity of SAF projects, creates a lack of certainty on financial and technological outcomes. A scarcity of projects further inhibits investment, as financiers are unable to build and manage industrial plants, and as yet, few proposals have proven bankable from a debt perspective. Challenges in certifying green credentials, risks of regulatory changes, and concerns around the SAF's early stage contribute to investor apprehension, as does the perceived inefficiency and expense of existing production methods. Uncertainties surrounding green definitions within the supply chain, the appropriate production process to finance, global demand, and regulatory frameworks all contribute to a climate of uncertainty. From a project finance perspective, a lack of predictable cash flows and proof of large-scale production further discourage investment.

What would give you confidence to more actively explore SAF as an investment opportunity in the short-term (10 years)?

Increased confidence in investing in SAF in the short-term would stem from several developments. Respondents cited a need for **government guarantee schemes**, pricing certainty on offtake contracts, and regulatory clarity on a regional scale. **Assurance from governments** to underpin early projects would help, as would the demonstration of more airlines signing offtake agreements earlier in a project's lifecycle. The availability of **high-quality technical due diligence** carried out by independent experts would further bolster confidence, alongside the announcement of multiple SAF projects worldwide and large offtake commitments, particularly those accompanied by equity investments from operators. Evidence of mature technology with proven results at the demonstration phase and the establishment of a greater supply and secondary financial market are also needed. A **proven early track record**, involvement of credible sponsors and equity providers, and stringent targets set by organisations like IATA or ICAO would further encourage investment. Participants also pointed to the necessity for a government-backed regulatory framework for SAF sustainability certification and supply chain, alongside clear pathways for airline accreditation and verification by financing parties. Similar subsidy approaches to the USA from entities like the EU would help boost investment, more **certainty on demand** and the global policy framework, and more clarity on regulatory issues and production processes are also desired. A number of respondents cited that **long-term certainty**, including a well-defined policy landscape and reliable risk mitigation system, is also critical, as are ringfenced project finance or corporate/governmental guarantees.

What would give you confidence to more actively explore SAF as an investment opportunity in the long-term (30 years)?

Long-term confidence in SAF investment, over a 30-year period, would be significantly influenced by several key factors. Respondents suggested mandated blend rates and the establishment of a pathway towards the global abandonment or taxation of fossil fuels to bridge the cost gap between conventional and alternative fuels. Further, alignment between the public and the aviation industry regarding the necessity and feasibility of SAF as the primary decarbonisation pathway for commercial aviation would bolster confidence. The availability of high-quality, independently carried out technical due diligence, alongside **regulatory permission for aircraft to fly on 100% SAF fuel**, were identified as crucial. Considerations around the lifecycle of production plants and de-risking of technology through proven track records, coupled with the development of a liquid and stable SAF market supported by transparent, **stable regulation**, were also highlighted. Firm commitments from governments and airlines are deemed essential, as is government regulation in areas such as SAF certification, supply chain, and airline accreditation. Emphasising sustainability in long-term planning, achieving significant cost reductions, and gaining clarity on the most efficient and sustainable production methods were also pointed out as vital for increasing investment interest. Additional factors include **government support on financing, price guarantee mechanisms, a reliable risk mitigation system, ringfenced project finance and policy stability**.