

## Boeing and Clear Sky Launch Partnership to Help Decarbonize Aviation

- UK's Firefly Green Fuels is first beneficiary of the partnership and a Clear Sky-led consortium
- Collaboration will support development of Firefly's UK-based refinery and enable the company's expansion into global markets
- This new pathway will help decarbonize aviation by transforming sewage into SAF

**FARNBOROUGH, United Kingdom, July 23, 2024** – Boeing [NYSE: BA] and Clear Sky, an investment company dedicated to aviation sustainability, are joining forces to accelerate sustainability solutions for aviation. As an initial project, the companies will help in testing and advancing Firefly Green Fuels' cutting-edge technology to increase sustainable aviation fuel (SAF) production in the UK.

Firefly transforms sewage waste feedstock into SAF through hydrothermal liquefaction (HTL). This process uses heat and high pressure to convert waste into biocrude oil and biochar, a powdery substance that can be used as a fertilizer. SAF produced from this abundant, yet untapped feedstock reduces lifecycle CO<sub>2</sub> emissions by more than 90% compared to traditional petroleum jet fuel, according to independent analysis.

The Clear Sky-led consortium of investors and strategic partners, including Boeing, will invest in Firefly's new technology, subject to final diligence. Boeing will provide training, direction and facilitation on testing that will accelerate the qualification of this new route to SAF.

"SAF offers the greatest opportunity to decarbonize aviation, and the industry's collective challenge of bringing it to scale globally requires new sustainable pathways," said Brian Moran, Boeing's chief sustainability officer. "Clear Sky combines many years of investment expertise with knowledge on aviation's decarbonization challenges. Firefly's technology holds transformative potential as the SAF feedstock, sewage waste, is accessible in all regions of the globe.

Currently SAF represents 0.1% of global jet fuel use. In the UK the pending mandate to achieve 10% SAF in the jet fuel mix by 2030 will require 1.2 million tonnes of SAF by 2030, increasing to 7 million tonnes by 2050, according to ICF's [UK Net Zero Carbon Roadmap](#). Boeing and Clear Sky's investment demonstrates progress on the roadmap given the available UK sewage waste can meet a significant proportion of the UK's SAF requirement.

"In a world where demand for SAF outstrips available supply, Firefly is paving the way to cost-competitive and globally available fuel," said James Hygate, CEO of Firefly. "With the support of Clear Sky and Boeing, we are propelling toward our goal of commercial production in the UK by 2029, and rapid replication across the globe."

In addition to supporting Firefly, Boeing and Clear Sky are embarking on an international investment partnership focused on sustainability solutions that span aviation and adjacent industries such as chemicals and materials. Areas of focus include SAF, alternative propulsion, carbon removal and advanced materials and recycling.

"Boeing is undoubtedly a leader in advancing aviation's decarbonization journey," said Krishnan Narayanan, Founding Partner at Clear Sky. "We are delighted to be collaborating with Boeing to scale Firefly with more projects to be announced in the future."

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*As a leading global aerospace company, Boeing develops, manufactures and services commercial airplanes, defense products and space systems for customers in more than 150 countries. As a top U.S. exporter, the company leverages the talents of a global supplier base to advance economic opportunity, sustainability and community impact. Boeing's diverse team is committed to innovating for the future, leading with sustainability, and cultivating a culture based on the company's core values of safety, quality and integrity. Join our team and find your purpose at [boeing.com/careers](https://boeing.com/careers).*

*Clear Sky is a global investment company with the dual objectives of accelerating aviation's journey towards net-zero emissions while generating attractive returns for its investment partners. These include corporates from aviation, chemicals and other heavy industry and financial institutions. Incubated by the financiers at RAIN and launched earlier in 2024, it is led by a unique mix of senior professionals from the worlds of aviation, sustainability, energy and investing. Its investment strategies focus on sustainable aviation fuel, carbon removals, alternative propulsion, ground operations greening, and materials recycling. <https://www.clearsky.eco/>*

*Firefly's technology originated in the laboratories of Green Fuels, a pioneer in renewable fuels founded in 2003 and awarded a Royal Warrant of Appointment to the former HRH the Prince of Wales, now King Charles III. Firefly demonstrates an integrated technology route to SAF using sewage sludge as feedstock, addressing a market opportunity and unmet need. This route, once qualified to international standards, will greatly contribute to the supply of SAF globally. The company is on a mission to fight climate change by transforming a problematic waste into truly sustainable fuel. <https://flyfirefly.uk/>*

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