



## Frequently Asked Questions

### Avfuel SAF, Powered by Neste MY Sustainable Aviation Fuel

*Avfuel—a leading independent global supplier of aviation fuel and services—and Neste—a leading global renewable fuels manufacturer—are excited to announce a new partnership whereby Avfuel will supply Neste-produced sustainable aviation fuel to its customer base on a continuous basis. The supply agreement places Avfuel at the forefront of the sustainability initiative for business aviation, enabling the fuel supplier to meet the growing needs of its sustainably-minded customer base.*

#### **How much SAF will be available?**

Neste will provide Avfuel with Neste MY Sustainable Aviation Fuel™ in volumes able to meet the growing demands of the fuel supplier's customers, including fixed base operators (FBOs), airports, flight departments, original equipment manufacturers (OEMs) and commercial/cargo operators.

#### **Where will Avfuel supply the SAF?**

Primarily on the West Coast of the U.S. from a terminal in Northern California.

Monterey Jet Center (KMRY)—an Avfuel-branded FBO—will be the first customer to receive a consistent supply of SAF. With the first delivery scheduled for the first quarter of 2021, Neste and Avfuel will work with Monterey Jet Center to ensure that the supply chain, from production through invoicing, functions smoothly before rolling the program out to a larger customer base.

#### **What if I'm not on the West Coast? Can I still get SAF?**

While much of the physical SAF product will be distributed throughout the West Coast of the U.S., customers outside of this region will soon be able to purchase the fuel via a book and claim model that Avfuel expects to unveil in 2021. Through this system, operators elsewhere in the world can offset their emissions by purchasing SAF from Avfuel on a credit-per-gallon basis and applying the resulting emissions reductions to their sustainability metrics.

Additionally, Avfuel and Neste will continue to look for opportunities to increase SAF availability in North America and beyond, including potentially supplying SAF to customers throughout Europe.

#### **What is the SAF made from?**

The fuel is made from 100% renewable, sustainably sourced waste and residue materials, such as used cooking oils, grease and rendered animal fats.

Looking forward, Neste is researching a new generation of sustainable, renewable raw materials that can be used to make SAF, like algae, municipal solid waste and even converting power to liquids. SAF made from these future fuels could deliver even greater environmental benefits.

## **Where does Neste produce SAF?**

Neste operates a global portfolio of renewable product production and blending facilities with assets in Porvoo, Finland, Rotterdam, The Netherlands and Singapore. It produces SAF at its Porvoo facility, and then works with partners in the U.S. and Europe to ensure the product meets the quality requirements set for jet fuel. Initially, the SAF for Avfuel will be delivered to the West Coast from the U.S. Gulf Coast, in addition to Singapore beginning in 2023.

## **Why is SAF needed?**

Air travel is expected to grow in the decades ahead, and that means so will the use of fossil jet fuel and greenhouse gas emissions from airplanes if we continue business as usual. In fact, the FAA predicts that US fossil jet fuel consumption could increase from 27 billion gallons in 2019 to 30.64 billion gallons per year from now through 2040.

In 2009, business aviation announced its commitment to fight climate change, including a few specific goals: achieve carbon neutral growth by 2020, improve fuel efficiency by 2% per year by 2020 and reduce CO2 emissions by 50% by 2050 relative to 2005. The use of SAF will be integral to achieving this goal.

## **What kind of measurable difference is this making in the environment?**

In its neat form and over its lifecycle of production and distribution, SAF can reduce greenhouse gas emissions by up to 80% compared to conventional jet fuel. Once blended at a 35% ratio, Avfuel anticipates a 19 metric ton reduction in carbon emissions per truck load.

## **What is a lifecycle carbon analysis?**

Lifecycle carbon analysis, or LCA, is a way to measure the greenhouse gas emissions of each drop of fuel--from the moment the raw material used to make the fuel is collected to the moment the finished fuel product is used to power a vehicle. From waste to turbine engines, Neste can fully trace each drop of SAF back to the raw material used to make it. This allows Neste to verify the greenhouse gas (GHG) reductions its SAF delivers compared to fossil jet A as well as the sustainability of its products.

## **How does Neste determine the GHG reductions of its products?**

The method used to calculate lifecycle emissions and emission reduction complies with applicable international standards. In the US, this means the Renewable Fuel Standard and California's Low Carbon Fuel Standard (LCFS).

## **How does SAF fit in with other solutions for aviation?**

The aviation industry is continuing to take great strides to reduce carbon emissions - from using modern, fuel efficient aircraft, to optimizing fleet routes and airport activity, to providing carbon offsets. Sustainable aviation fuel is the only viable solution for immediate decrease of emissions from aviation and creating a sustainable, low emission future for air travel.

## **How much does SAF cost?**

Currently, SAF, on average, costs between two to three times more than conventional jet fuel. However, three big factors can help make it more price competitive with fossil jet A.

- » First, we expect prices will come down as the industry scales production capacity and finds efficiencies.
- » Second, policy makers can help by creating a level playing field for SAF to compete through various incentives and comparable LCFS (low carbon fuel standard) mechanisms to CA and OR.
- » Finally, climate conscious individuals can choose to travel on flights powered by SAF, even if they cost a bit more. We believe there is a growing number of people who want to fly with the peace of mind that comes from protecting the planet. We see the same trend in the business community, with major companies making bold commitments to fight climate change and become carbon neutral throughout their operations.

## **How big is the market for SAF?**

Right now, the market for sustainable aviation fuel is still in the build-up phase, but this partnership between Avfuel and Neste is a huge step forward, enabling Avfuel customers to receive a continuous supply of fuel. Demand is there—from business and general aviation, and commercial and cargo aviation. Importantly, we also see demand for low emission solutions from passengers.

## **Is SAF certified to work in aircraft engines and with airport infrastructure?**

Yes. SAF, once blended with conventional jet fuel, is certified according to the conventional specification for aviation fuel (ASTM), meeting the same strict quality and safety requirements. SAF can be used as a drop-in fuel with existing aircraft engines and airport infrastructure, requiring no extra investment.

## **Why does SAF need to be blended with conventional jet fuel?**

Regulations currently allow for up to 50-50 blend of SAF with conventional jet fuel.

## **How long has Neste been manufacturing SAF?**

Neste has been developing the market for sustainable aviation fuels for nearly a decade with first test flights taking place in 2011. Neste is recognized globally as the leading producer of renewable fuels, including Neste MY Sustainable Aviation Fuel.

## **Further Questions?**

Contact Keith Sawyer, Avfuel's Manager of Alternative Fuels | [ksawyer@avfuel.com](mailto:ksawyer@avfuel.com) | 925-989-0479

## **Neste Specific Questions?**

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## **About Avfuel Corporation**

Avfuel provides fuel and services to the global aviation industry and is the leading independent supplier in the United States. Established as a supply and logistics company more than 45 years ago, Avfuel is core competent in every aspect that surrounds the delivery of fuel—from refinery to wingtip. Avfuel combines global access with personalized service throughout a fueling network of more than 3,000 locations worldwide and 650+ Avfuel-branded FBOs. Our 100% dedication to aviation demonstrates our passion and commitment to a global community that prospers on the movement of goods and services around the world.

## **About Neste**

Neste (NESTE, Nasdaq Helsinki) creates solutions for combating climate change and accelerating a shift to a circular economy. We refine waste, residues and innovative raw materials into renewable fuels and sustainable feedstock for plastics and other materials. We are the world's leading producer of renewable diesel and sustainable aviation fuel, developing chemical recycling to combat the plastic waste challenge. We aim at helping customers to reduce greenhouse gas emissions with our renewable and circular solutions by at least 20 million tons annually by 2030. As a technologically advanced refiner of high-quality oil products with a commitment to reach carbon-neutral production by 2035, we are also introducing renewable and recycled raw materials such as waste plastic as refinery raw materials. We have consistently been included in the Dow Jones Sustainability Indices and the Global 100 list of the world's most sustainable companies. In 2019, Neste's revenue stood at EUR 15.8 billion, with 82% of the company's comparable operating profit coming from renewable products. Read more: [neste.com](https://www.neste.com)