First Emirates A380 demonstration flight using 100% Sustainable Aviation Fuel (SAF).

On 22 November 2023, Emirates became the first airline to operate an A380 demonstration flight using 100% SAF. The demonstration flight paves the way for future standardisation, certification and adoption of 100% SAF flying.

This is also the first time that drop-in SAF is used on an A380 aircraft with full compatibility across its existing systems.

100% SAF was used in one engine, while conventional jet fuel was used in the other three engines. The flight highlights the almost identical performance and compatibility of SAF to conventional jet fuel, making it a safe and reliable fuel source. It also contributes to the growing body of industry research to evaluate the effects of 100% SAF on aircraft performance.

SAF is currently capped at a 50% blend limit in engines for commercial flights.

Emirates participates in a range of industry and UAE government working groups to help scale the production and supply of SAF.

Emirates is one of the launch entities of Air-CRAFT, a UAE-based research consortium that brings together organisations across the value chain to develop, produce, and scale SAF technologies.

Together with the UAE GCAA, Emirates has contributed to the development of the UAE’s power-to-liquid (PtL) fuels roadmap, driven by the UAE Ministry of Energy and Infrastructure and the World Economic Forum, and the UAE’s National Sustainable Aviation Fuel Roadmap launched in January 2023 by the Ministry of Energy and Infrastructure and UAE General Civil Aviation Authority.