

Emission Mitigation Certificate

Issue Date: 01.01.2023
Certificate Number: CCP/1372A

Yamaichi Electronics Deutschland GmbH

Lufthansa Group and Compensaid hereby guarantee the purchase of **1,688 kg** of Sustainable Aviation Fuel on behalf of **Yamaichi Electronics Deutschland GmbH** resulting in an emission mitigation of at least **5,046 kg CO₂e*** in comparison to conventional (fossil) jet fuel based on a Well-to-Wheel assessment. This fuel has not been derived from Palm Oil or Palm Fatty Acid Distillates and the resulting mitigation is exclusively allocated to the aforementioned company. The fuel manufacturer is certified according to ISCC EU and complies with the requirements of the RED and the certification system ISCC EU which is approved by the European Commission.

Total Mass: 1,688 kg
Total Energy Equivalent: 72,246 MJ
WTW emission factor: max. 17,46 g CO₂e*/MJ
Mitigation in percent (WTW basis): min. 80 %
Mitigation (absolute): min. 5,046 kg CO₂e*
Fossil fuel reference: min. 6,307 kg CO₂e*
Uplift location: Frankfurt (FRA)

CO₂e* mitigation
5,046 kg

Amount of SAF purchased
1,688 kg



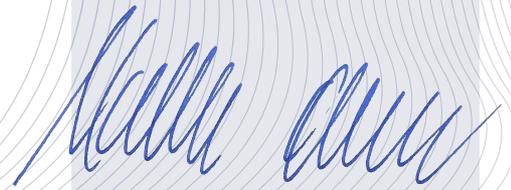
Jan Pechstein

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Compensaid, Managing Director Lufthansa Innovation Hub



Müller-BBM Cert Umweltgutachter GmbH

Independent auditor for verification of this certificate and the associated calculation principle

* Includes CO₂-equivalents from production, transport and distribution of the fuel; excludes CO₂-equivalents from combustion.

Calculation based on:

emission factor SAF (TTW): 0 g CO₂e/MJ; emission factor fossil fuel (TTW, acc. Regulation (EU) 2018/2066): 3,150 g CO₂/kg Jet-A1; energy factor (acc. DIN 16258): 44.1 MJ/kg Jet-A1; emission factor SAF (WTT): as given in NABISY Certificate or Refiner's Biofuel Sustainability Statement; emission factor fossil fuel (WTT, acc. DIN 16258): 15.9 g CO₂e/MJ; lower heating value (acc. ASTM D1655): min. 42.8 MJ/kg