

SAJF offtake agreements

Beyond numerous demonstration programs

neat quantities



+	UNITED		=
+	World Fuel Services	Gulfstream	=
+	SkyNRG NORDIC	KLM	=
+	air bp	OSLO AIRPORT	=
		SAS	=
		Lufthansa Group	=

Up to 5 M gpy from 2016 (LAX)

3 yr agreement
30/70 blend

3 yr agreement
Enabling LAX flts

Bioports on demand, et al.

- Halmstad
- Arlanda
- Bromma
- Goteborg
- Leeuwarden



+	CATHAY PACIFIC		=
+	UNITED		=
+	air bp		=
+	JAPAN AIRLINES	Marubeni	=

37.5M gpy

90-180 M gpy

50 M gpy

Project Development, License, and Offtake

10 yr agreements



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	+		=	3 M gpy each, 7 yrs (Bay Area, CA)
	+		=	
	+		=	A350 deliveries 10% blend (ex-TLS)
	+		=	10M gpy, 10 yrs (JFK)
	+		=	4M gpy, 10 yrs (LAX)
	+		=	Up to 1M gpy, 5 yrs+
	+		=	Brisbane Supply Demonstration

These offtakes/efforts represent >250 M gpy, and account for the total production slate of the first several commercialization efforts

Other recent announcements

effort



BRITISH AIRWAYS =
 In negotiation =

MSW-based
 FT-SPK evaluations
 BTL #1, Natchez, MS
 1,400 bpd



American Airlines DFW DALLAS FORT WORTH INTERNATIONAL AIRPORT =

SAJF Supply exploration

Alaska =

MOU to design & implement adoption

air bp =

Collaboration on supply expansion



QANTAS =

Carinata supply development



=

SAJF Supply collaboration



Other recent announcements

effort

DG Energy



GE Aviation



0.5M gpy, 10 yrs

Multiple Producers, TBA



World Fuel Services



Full production slate
offtakes



Gothenburg
Refinery



SAS



Long-term supply
negotiation (from 2022)



LanzaTech
capturing carbon fueling growth



virgin atlantic



UK DfT F4C Funding: ATJ
Development
Demo flight MCO-LGW

TBA



FINNAIR



Customer funding of SAJF
purchase from 2019

Multiple Producers
& Suppliers



Airports and
Airline Tenants



Port of Seattle
Seattle-Tacoma
International Airport

SFO



Exploration of
Greater ambition

Commitments of greater ambition



First U.S. Airline to Pledge to Reduce Own Emissions by 50 Percent (vs. 2005) by 2050; 13Sep'18



Obtain 30% of jet fuel from alternative sources by 2030; 06Nov'17



Norway's government introduces 0.5 % blending mandate for advanced aviation biofuels from 2020; 04Oct'18



Moving forward with \$350M expansion to enable 306M gpy total capacity, including infrastructure for jet capacity of 150M gpy; 24Oct'18