

AVIATION CO₂ REDUCTIONS



STOCKTAKING SEMINAR

TECHNOLOGY · OPERATIONS · SUSTAINABLE AVIATION FUELS

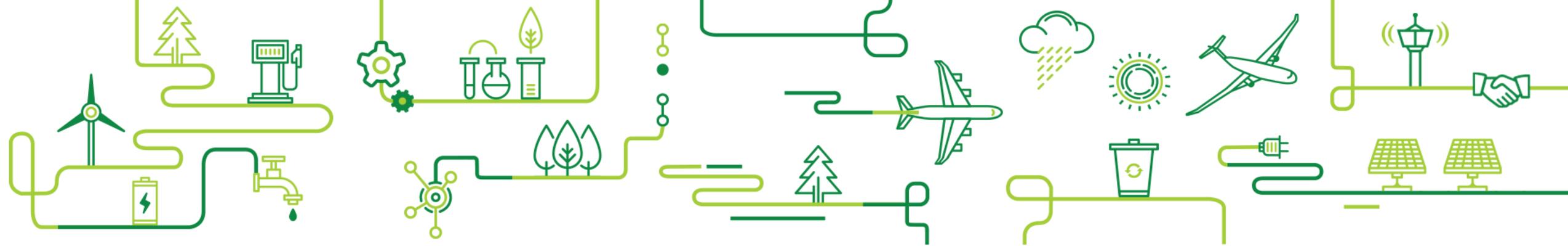


SAF competitiveness and scale-up

Jimmy Samartzis

CEO – LanzaJet





We recycle carbon and produce valuable, sustainable fuels and chemicals



LanzaTech

Gasification and Gas Fermentation → Ethanol

LanzaJet

Ethanol → Sustainable Fuels



De-risking Deployment



Disrupting Feedstock

A flexible feedstock platform, enabling ethanol from **any sustainable source** to be produced locally and converted at a central facility



Disrupting Technology

A scalable alcohol-to-jet technology capable of producing SAF that **lowers emissions** and **reduces contrails**

De-risking Commercialization



Disrupting Financing

A dual-tranche financing mechanism to **call cash for commercial** facilities upon Freedom Pines Fuels success



Disrupting the Status Quo

A qualified drop-in fuel with **100 million GPY production operational by ~2025**

LanzaJet has been on an intentional development path for 10 years

Founded

LanzaTech founded in New Zealand with focus on recycling carbon to produce valuable fuels and chemicals



Partnership with US Dept of Energy

LanzaTech partners with Pacific Northwest National Lab (PNNL) to develop alcohol-to-jet technology



ASTM Qualification & First Commercial Flight

Ethanol added as an approved feedstock to ASTM D7566 Annex A5; SPK from LanzaTech ethanol completed all required property and fit for purpose testing. First commercial transatlantic flight using Carbon Capture & Utilization (CCU) SAF.



Launch of LanzaJet, Inc.

Innovative and disruptive structure and financing to accelerate commercialization of sustainable fuel production technology; four refineries planned to be operational by 2025



Leverage proven commercialization experience to produce sustainable aviation fuel from ethanol

Aviation Fuels

Feedstock type	Conversion process
<i>Ethanol</i>	<i>Alcohol-to-Jet</i>

Versatile feedstock; Disruptive financing; Scalable technology; Accelerated commercialization



>16M Gallons Ethanol Produced in China



- 
CO₂ reductions per flight
Over 70%*
- 
Level of finance required
Up to \$120M
- 
Timeframe
2022 10M GPY
2025 100M GPY
- 
Main challenges
Enabling Policy

*GHG savings relative to conventional jet

Thank You



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Montréal

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