



# Fueling a sustainable future

Overview

October 7, 2023

[lanzajet.com](https://lanzajet.com)

# LANZAJET

SAF  
Market Projections  
through 2030

\$20 Billion

USD

>61%

CAGR

**The global SAF market is growing at a rapid pace**, and this can be attributed to the increasing passenger traffic and growing number of aircraft orders.

Moreover, **growing government support and requirements** for development of alternative jet fuels due to rising environmental concerns are also expected to propel market growth.

**SAF is an ideal substitute for petroleum-based jet fuel** and it offers several advantages such as lower carbon emissions and greater energy efficiency over conventional jet fuels.



# Decarbonizing Aviation to Net Zero – Multiple Levers



OPERATIONAL  
EFFICIENCY



OFFSETS &  
MARKET BASED  
MEASURES



ADVANCED  
TECHNOLOGY



SUSTAINABLE  
AVIATION FUEL  
(SAF)

The industry is aligned that SAF is the single greatest in terms of impact to achieve net. zero – 65%

# Building a Global Market

## Growing Supply

	USA	WORLD
SAF Production 2022	<b>16M</b> GALLONS / YEAR	<b>119M</b> GALLONS / YEAR
Fossil Jet Fuel Consumption 2019 (PRE COVID)	<b>21B</b> GALLONS / YEAR	<b>96B</b> GALLONS / YEAR

+

New...

Goals

Mandates

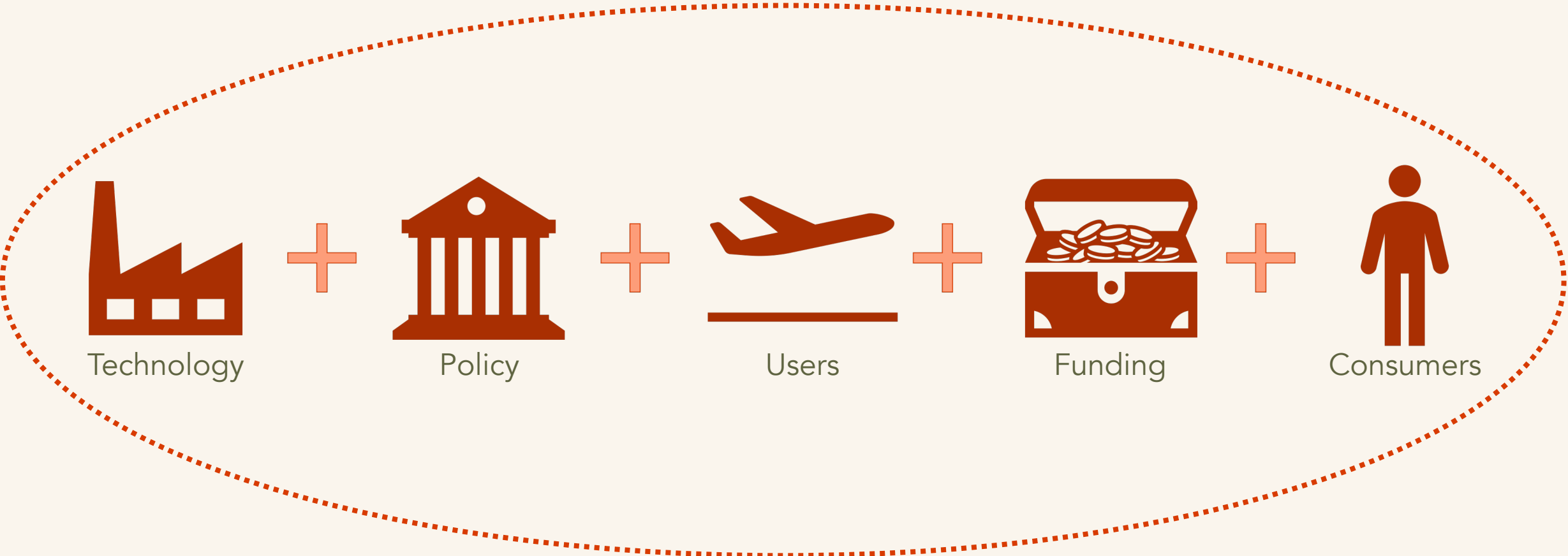
Incentives

Scale in Technology  
& Production



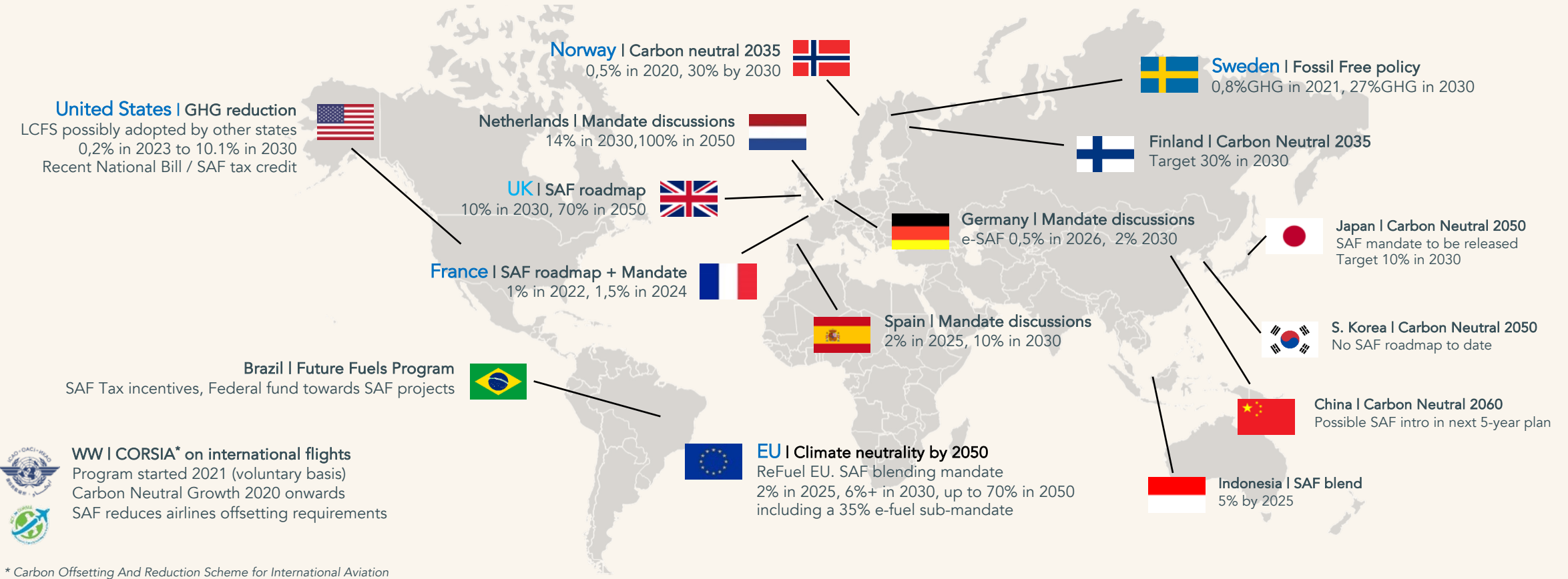
Catalyzing a  
New Global  
Market

# Industry is Making Substantial Progress – More Yet to Do



# Stable Long-Term Policy is Important

Legislation already in place.  
 Legislation soon to be in place.



# LanzaJet - History of Leadership in SAF

**1<sup>st</sup> TO MARKET**

Received ASTM approval for ethanol ATJ in 2018 using LanzaJet ATJ data, followed by commercial flights

**BEST TECH**

13+ years of technology development now being deployed commercially

**INDUSTRY LEADERS**

Industry-leading shareholders, supporters and partners

**WORLD'S 1<sup>st</sup>**

The world's first ATJ plant, fully funded, committed offtake in place for the next 10 years

**1 BILLION+ GPY**

Projects around the world: US, EU, UK, Japan, India, Australia, and New Zealand

**EXCELLENT  
ATTRIBUTES**

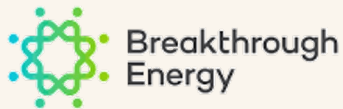
Significant reduction in GHG emissions, 95% reduction in particulates, increase in energy density

**WORLD-CLASS**

Building for growth and scalability with a world-class team of leaders, engineers, and innovators



# World-Class Funders and Supporters



- ✓ Funding commitments
- ✓ Commercial-scale projects commitments
- ✓ Offtake commitments
- ✓ Knowledge, support, and secondees commitments
- ✓ Feedstock supply flexibility commitments
- ✓ Innovative commitments

# Ethanol ATJ - Powerful Versatility in Feedstock

Just about any source of waste or pollution...



...can be transformed into SAF using ethanol ATJ

# LanzaJet - Leading Ethanol Alcohol-to-Jet (ATJ) Technology

High selectivity to SAF, high carbon conversion, abundant feedstock, and platform versatility

## 30B Gallons Available Today

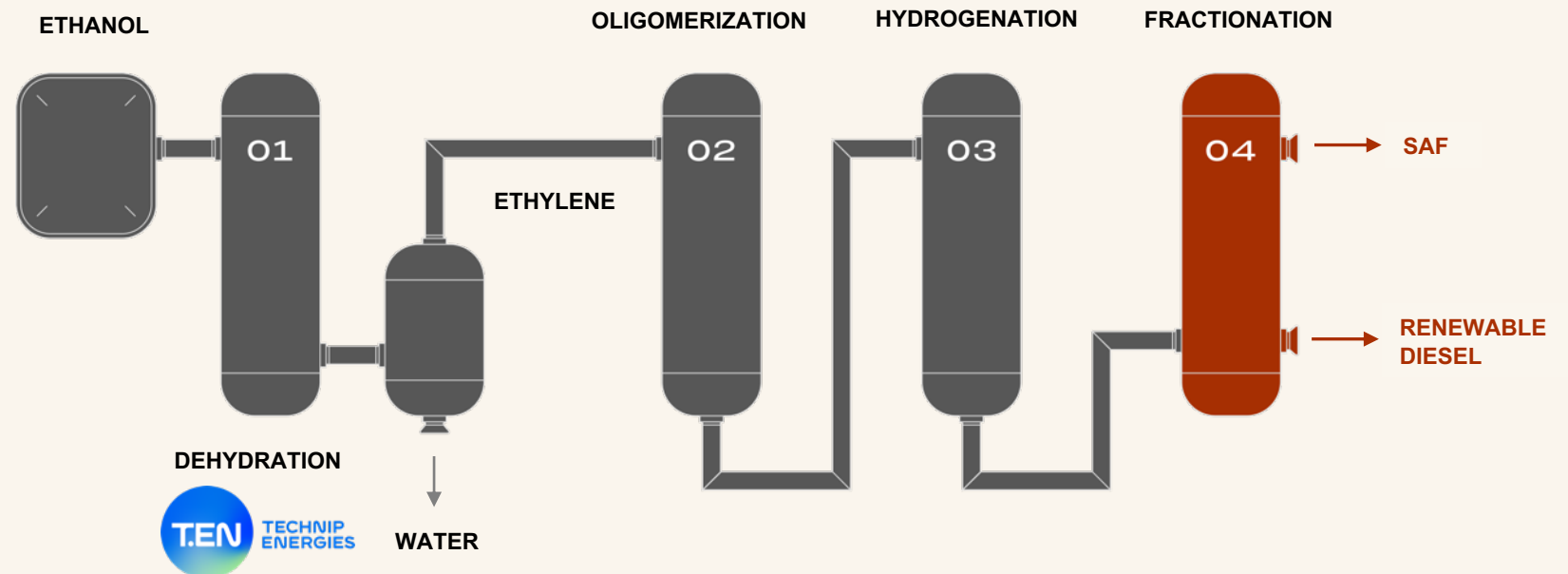
### Leveraging & Transitioning Existing Ethanol Supply

- Existing low-CI ethanol production
- Cellulosic ethanol
- Waste-based ethanol

## Unlimited Feedstock Potential

### Building New Waste-Based Ethanol Supply

- Industrial / landfill off-gasses
- Agricultural waste and residues
- Municipal Solid Waste (MSW)
- Corn fiber cellulose / sugarcane bagasse
- Direct Air Capture (DAC) – CO<sub>2</sub> + H<sub>2</sub>





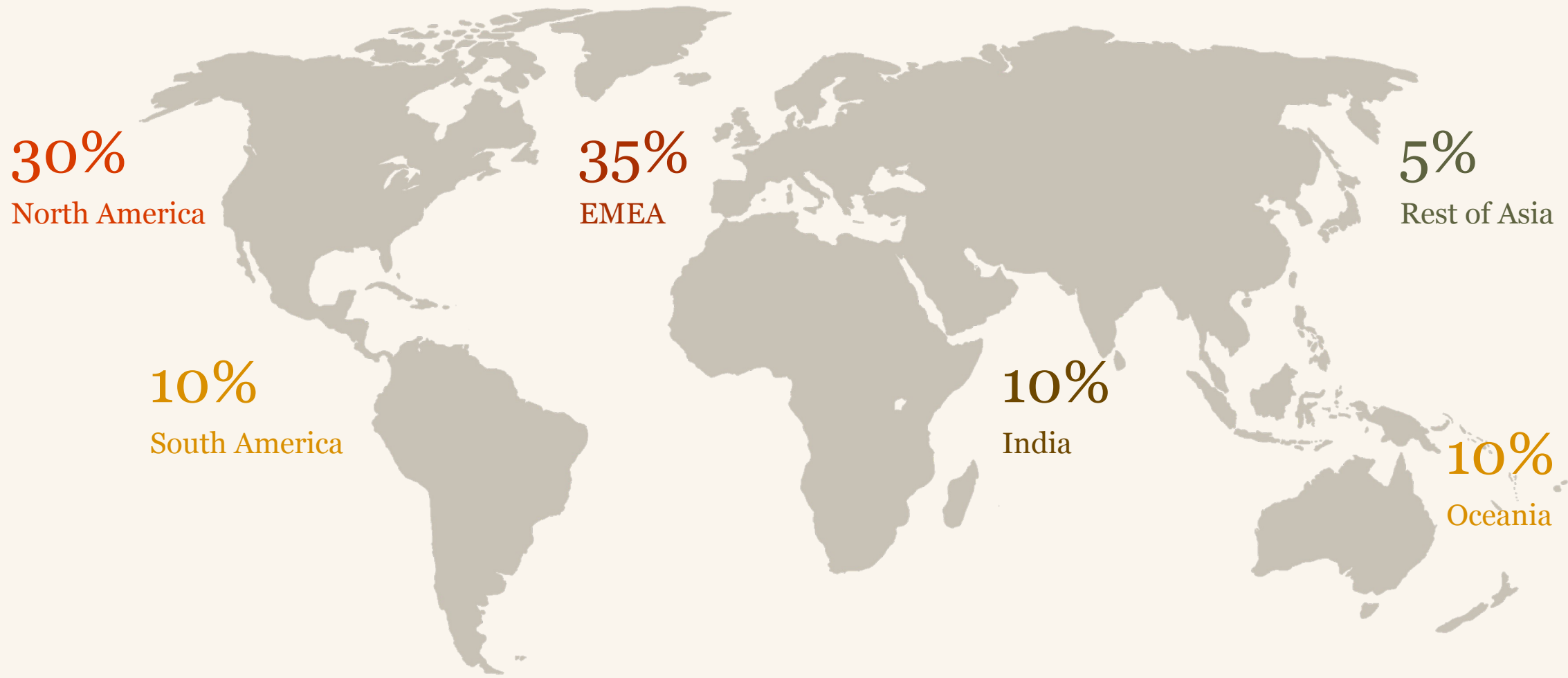
# Leading the Way – World's First Ethanol ATJ Plant

- The first and only SAF company to have funded and constructed a commercial ATJ biorefinery; construction complete in 2023
- Located in Soperton, GA – 100 miles West of Savannah, GA
- Total SAF/RD production of 10M GPY (90% SAF / 10% RD)
- Ethanol feedstock is multiple including sugarcane ethanol, cellulosic ethanol, and waste-based ethanol
- Site sits on 18 acres of land





# Strong Global Activity



# LanzaJet Progress in Japan



**MITSUI & CO.**

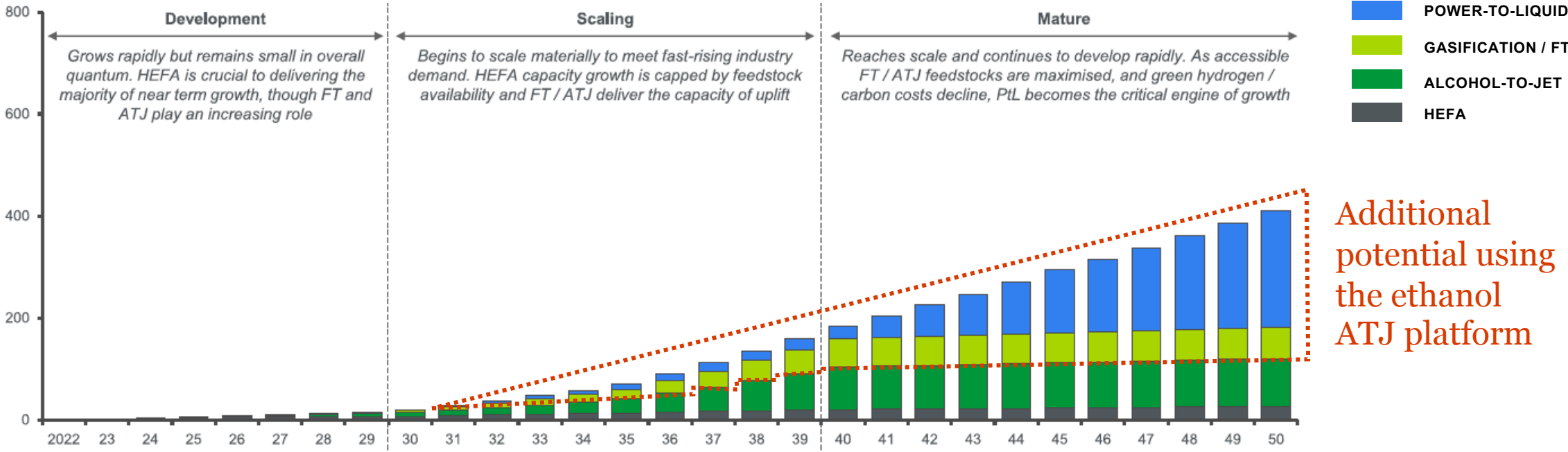


***JAPAN AIRLINES***

# ATJ Technology – Global Growth Potential

ATJ has the significant potential for supply growth as others hit capacity limits

**SAF PRODUCTION BY TECHNOLOGY PATHWAY (2022-2050)**  
MILLIONS OF TONNES



Source: LEK report Fueling the future of aviation (2023) with sources from Bergero et al. (2023), IATA, ATAG (2020), WEF (2021).



Someday is now.

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